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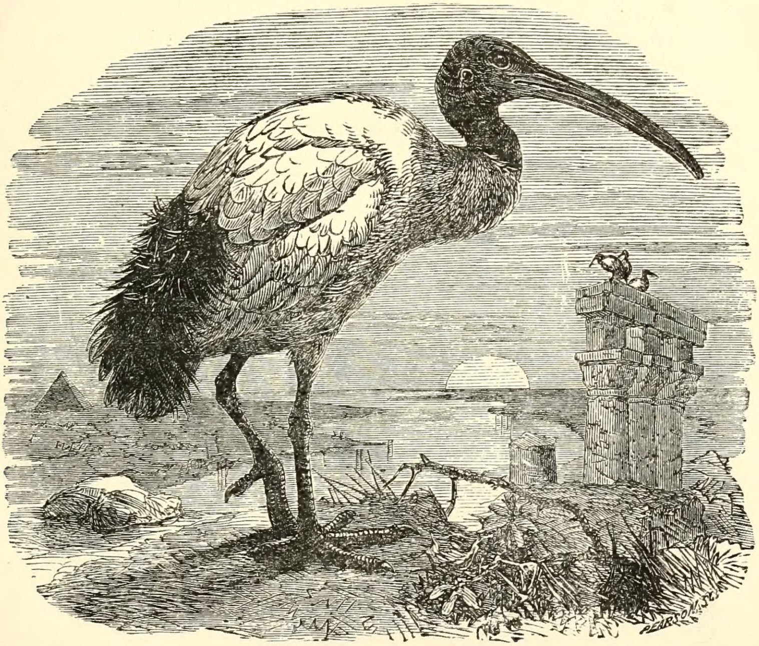
PHILIP LUTLEY SCLATER, M.A., Ph.D., F.R.S.,
SECRETARY TO THE ZOOLOGICAL SOCIETY OF LONDON,
AND
HOWARD SAUNDERS, F.L.S., F.Z.S.



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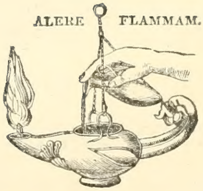
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PREFACE.

Our remarks on bringing to a close the twenty-sixth volume of 'The Ibis' will occupy but little space.

The April number this year, it will have been observed, was rather thin, and the Editors began to fear that contributions were falling off; but during the past six months, we are happy to say, an abundant supply of articles has arrived, enabling us to bring the volume up to its usual standard in quality, it is believed, as well as in quantity. For next year we have also several promising communications in preparation.

P. L. S.
H. S.

British Ornithologists' Union,
6 Tenterden Street, London, W.
September 25th, 1884.

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1884.

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THE IBIS.

FIFTH SERIES.

No. V. JANUARY 1884.

I.—*A Review of the Species of the Family* Icteridæ.—Part III. Agelæinæ. By P. L. Sclater, M.A., Ph.D., F.R.S.

(Plate I.)

[Continued from 'The Ibis,' 1883, p. 374.]

In reviewing the species of the third subfamily of the Icteridæ I shall, for convenience' sake, as in the case of the former subfamilies, adhere very closely to the sequence of genera adopted in the 'Nomenclator' and 'Catalogue of American Birds,' although I am well aware that it would not be difficult to show that in certain points this arrangement is by no means free from objections.

Subfam. III. Agelæinæ.

The Agelæinæ are a group of more terrestrial habits than the Cassicinæ and Icterinæ, and have their feet modified accordingly; the bill is shorter and more completely conical, and the culmen straight, flattened, and more or less broadened. But it is exceedingly difficult, I admit, to draw a line dividing some of the more tenuirostral forms of the Agelæinæ from

Icterus. I refer the following thirteen genera to this subfamily:—

i. *Dolichonyx*, p. 2.
ii. *Molothrus*, p. 3.
iii. *Cyrtotes*, p. 9.
iv. *Agelæus*, p. 9.
v. *Xanthocephalus*, p. 14.
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Genus I. DOLICHONYX.

Dolichonyx, Sw. Zool. Journ. iii. p. 351 (1827): type *D. oryzivora*.

1. DOLICHONYX ORYZIVORUS.

Emberiza oryzivora, Linn. S. N. i. p. 311; Wils. Am. Orn. ii. p. 48, pl. 13. f. 1, 2.

Passerina oryzivora, Vieill. N. D. xxv. p. 3.

Psarocolius caudacutus, Wagl. Syst. Av. sp. 32.

Dolichonyx oryzivora, Sw. Zool. Journ. iii. p. 351, et Faun. Bor.-Am. ii. p. 278; Bp. Consp. p. 437; Gosse, B. Jam. p. 229; Baird, B. N. Am. p. 522; Sclater, P. Z. S. 1858, p. 72 (Rio Napo), 1861, p. 74 (Jamaica), et Cat. A. B. p. 134; Sclat. et Salv. P. Z. S. 1870, p. 781 (Merida), 1876, p. 16 (Peru), et Nomencl. p. 37; Gundl. J. f. O. 1874, p. 129 (Cuba); Salvin, Ibis, 1866, p. 194 (Belize); Baird, Brew., et Ridgw. B. N. A. ii. p. 149; Pelz. Orn. Braz. p. 199 (Mato-Grosso); Darwin, Voy. Beagle, iii. p. 106 (Galapagos).

Suprà niger; nuchâ latâ pallidè cervinâ; interscapulio fusco variegato; secundariis dorso proximis et primariis fusco limbatis; scapularibus et dorso postico cum supracaudalibus albis, dorso medio in cinereum transeunte, subtùs niger, tibiis fuscis; rostro nigro; pedibus carneis: long. tota 7·0, alæ 3·8, caudæ 2·8. *Fem.* (et mas in vestitu hiemali). Suprà fulva nigro variegata, superciliis et corpore subtùs flavido-cinnamomeis.

Hab. Eastern North America and south through Central America and the West Indies to Panama, Venezuela, Guiana, Brazil, Peru, and Paraguay.

This well-known North-American bird wanders very far south in winter. I have specimens from Santa Marta, Cayenne, and Bolivia. Whitely got it in British Guiana in May, Natterer in Mato-Grosso in November (in non-breeding dress), and at Marabitanas, Rio Negro, in April, in full black dress, in which dress are also two Bolivian skins in my collection. Darwin obtained a single specimen in James Island, Galapagos, in October; and it is even said to have occurred in Heligoland (Seebohm, Ibis, 1877, p. 165)!

Genus II. Molothrus.

Molothrus, Sw. Faun. Bor.-Am. ii. p. 277 (1831): type *M. pecoris.*

Hypobletis, Gloger, Hand- u. Hilfsb. d. Nat. p. 260 (1842): type *M. pecoris.*

Callothrus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 17: type *M. æneus.*

Cyanothrus, Cassin, op. cit. p. 19: type *M. bonariensis.*

Agelaioides, Cassin, op. cit. p. 21: type *M. badius.*

Clavis specierum.

A. Unicolores: alis dorso concoloribus,	
nigro-nitens, capite brunneo	(1) *pecoris.*
æneo-nitens,	
unicolor	(2) *æneus.*
flavicante perfusus	(3) *armenti.*
nigro-nitens unicolor,	
crassitie mediâ	(4) *bonariensis.*
crassitie minore	(5) *atronitens.*
crassitie majore	(6) *cassini.*
subtùs magis purpurascens	(7) *purpurascens.*
nigro-nitens, maculâ campterii castaneâ	(8) *rufo-axillaris.*
B. Discolores: alis extùs rufis,	
cineraceus, subtùs dilutior	(9) *badius.*
fuscus, subtùs ochracescens	(10) *fringillaceus.*

1. Molothrus pecoris.

Troupiale de la Caroline, Daub. Pl. Enl. 606. fig. 1.

Fringilla pecoris, Gm. S. N. i. p. 910.

Emberiza pecoris, Wils. Am. Orn. ii. p. 145, pl. 18. f. 1, 2, 3.

Molothrus pecoris, Sw. Faun. Bor.-Am. ii. p. 277, et Phil. Mag. 1827, i. p. 436 (Mexico); Bp. Consp. p. 436; Cab. Mus. Hein. i. p. 193; Baird, B. N. Am. p. 524; Sclater, P. Z. S. 1857, p. 213 (Mexico), 1859, p. 365 (Vera Cruz), 1860, p. 252 (Orizaba), et Cat. A. B. p. 134; Scl. et Salv. Nomencl. p. 37; Dresser, Ibis, 1865, p. 492 (Texas); Cassin, Pr. Ac. Sc. Phil. 1866, p. 18; Baird, Brew., et Ridgw. B. N. A. ii. p. 154; Coues, Pr. Ac. Sc. Phil. 1866, p. 90 (Arizona), et B. N. W. p. 180.

Molothrus ater, Gray, Hand-l. ii. p. 36*; Coues, Check-list (1882), p. 62; Ridgw. P. U. S. N. M. iii. p. 182.

Molothrus obscurus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 18.

Molothrus pecoris, var. *obscurus*, Coues, Key, p. 155.

Molothrus ater obscurus, Ridgw. P. U. S. N. M. iii. p. 182; Sennett, Bull. U. S. Geol. Surv. v. p. 396 (Rio Grande); Merrill, Pr. U. S. N. M. 1879, p. 130 (Texas).

Niger purpureo micans; capite toto undique cum cervice et pectore summo fumoso-brunneis: rostro et pedibus nigris: long. tota 7·0, alæ 4·2, caudæ 3·2. *Fem.* Fusca unicolor, subtùs paulò dilutior.

Hab. N. America and southwards throughout Mexico to Oaxaca and Vera Cruz.

Mus. S.-G. et P. L. S.

Specimens from Western Mexico (Mazatlan, *Forrer*) are of much smaller size, and have been separated as *Molothrus obscurus* by Cassin; but examples from Vera Cruz seem to be fully, or very nearly, as large as northern birds. *Cf.* Coues, Key N. A. B. p. 155.

2. MOLOTHRUS ÆNEUS.

Psarocolius æneus, Wagl. Isis, 1829, p. 758; Bp. Consp. p. 426.

Molothrus æneus, Cab. Mus. Hein. i. p. 192; Sclater, P. Z. S. 1856, p. 300 (Cordova, Mex.), 1859, p. 365 (Jalapa) et p. 391 (Oaxaca), et Cat. A. B. p. 135; Sclat. et Salv. Ibis, 1860, p. 34

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* Boddaert does not appear to have assigned the name *ater* to Pl. Enl. 606. fig. 1, but merely to have associated (*erroneously*) with it the Black Oriole (*Oriolus ater*) of Latham. *Cf.* Ibis, 1883, p. 583.

(Guatemala); Nomencl. p. 37; Cassin, Pr. Ac. Sc. Phil. 1866, p. 18; Owen, Ibis, 1861, p. 61 (eggs); Cab. J. f. O. 1861, p. 81 (Costa Rica); Merrill, Bull. Nutt. Orn. Cl. 1877, p. 85 (Rio Grande); Sennett, Bull. U. S. Geogr. Surv. vol. iv. no. 1, p. 23 (Rio Grande); Coues, Check-list (1882), p. 62; Lawr. Mem. Bost. Soc. N. H. ii. p. 281 (N.W. Mexico).

Molothrus robustus, Cab. Mus. Hein. i. p. 193.

Sericeo-viridescenti-æneus; alis caudâque nigris, extùs purpurascenti-violaceis; subalaribus et subcaudalibus purpureo lavatis; rostro et pedibus nigris: long. tota 8·3, alæ 4·8, caudæ 3·4. *Fem.* Suprà fusco-cinerea æneo obsoletè variegata, subtùs dilutior: crassitie minore.

Hab. Southern Mexico, Yucatan, Guatemala, Costa Rica, and Veragua.

Mus. S.-G. et P. L. S.

Dr. Cabanis (J. f. O. 1861, p. 81) has recognized his *M. robustus* as the female of the present species; but I think the plumage described under the name *M. robustus* is probably referable to the young male, and not to the female.

3. MOLOTHRUS ARMENTI.

Molothrus armenti, Cab. Mus. Hein. i. p. 192; ej. J. f. O. 1861, p. 82; Cassin, Pr. Ac. Sc. Phil. 1866, p. 18.

Similis præcedenti, sed crassitie minore, et nitore sericeo flavescenti-brunneo perfusus: mihi nondum obvius.

Hab. Coast-region of Colombia; Cartagena (*Cabanis*); Savanilla (*Lawrence*); Demerara (*Cassin*).

Mus. Berol., Acad. Phil., et G. N. Lawrence.

4. MOLOTHRUS BONARIENSIS.

Tangavio, Daub. Pl. Enl. 710, undè

Tanagra bonariensis, Gm. S. N. i. p. 898.

Tordo comun, Azara, Apunt. i. p. 275.

Icterus sericeus, Licht. Doubl. p. 19; Tsch. Faun. Per. p. 225.

Molothrus sericeus, Bp. Consp. p. 437; Newton, Ibis, 1860, p. 308; Pelz. Orn. Bras. p. 200; Scl. Cat. A. B. p. 135.

Icterus minor, Spix, Av. Bras. i. p. 67, pl. 63 (?).

Icterus violaceus, Max. Beitr. iii. p. 1212.

Scolecophagus sericeus, Sw. An. in Menag. p. 301.

Molothrus bonariensis, Cab. Mus. Hein. i. p. 193; Scl. et Salv. P. Z. S. 1868, p. 140 (Arg. rep.), et Nomencl. p. 37; Cassin, Pr. Ac. Sc. Phil. 1866, p. 19; Hudson, P. Z. S. 1872, p. 809, et 1874, p. 153 et seqq. (Buenos Ayres); Berlepsch, Journ. f. Orn. 1873, p. 249 (Santa Catharina); Durnford, Ibis, 1877, pp. 33, 174 (Chupat); Forbes, Ibis, 1881, p. 339 (Pernambuco).

Icterus violaceus, Wied, Beitr. iii. p. 1212.

Icterus minor, Spix, Av. Bras. i. p. 67, t. lxiii. fig. 2 (?).

Molothrus niger, Gould, Zool. Voy. 'Beagle,' iii. p. 107.

Passerina discolor, Vieill. N. D. d'H. N. xxxiv. p. 552, et Enc. Méth. p. 937.

Molobrus sericeus, Burm. Syst. Ueb. iii. p. 279, et La-Plata Reise, ii. p. 494; Sternb. J. f. O. 1869, p. 125.

Ater, purpureo-nitens, unicolor, in alis et caudâ magis æneus; rostro et pedibus nigris: long. tota 7·7, alæ 4·5, caudæ 3·0. *Fem.* Fuscescenti-cinerea, subtùs paulò dilutior.

Hab. Brazil and southwards throughout Buenos Ayres to Patagonia; Chupat (*Durnford*).

Mus. P. L. S. et S.-G.

I am not quite satisfied as to the real distinctness of what are usually regarded as the northern representatives of this species (*M. atronitens*, *M. cassini*, and *M. purpurascens*), but for the present I keep their synonymy distinct.

5. MOLOTHRUS ATRONITENS.

Molothrus atronitens, Cab. in Schomb. Guian. iii. p. 682, et Mus. Hein. i. p. 193; Pelz. Orn. Bras. p. 200; Finsch, P. Z. S. 1870, p. 576 (Trinidad); Scl. et Salv. Nomencl. p. 37 (1873); Berlepsch, J. f. O. 1873, p. 249.

Similis præcedenti, sed crassitie minore: long. tota 7·5, alæ 3·7, caudæ 2·8.

Hab. Guiana, Venezuela, and Trinidad.

Mus. P. L. S. et S.-G.

6. MOLOTHRUS CASSINI.

Molothrus discolor, Cassin, Pr. Ac. Sc. Phil. 1866, p. 20; Scl. et Salv. Nomencl. p. 37, et P. Z. S. 1879, p. 509 (Antioquia); Salv. et Godman, Ibis, 1880, p. 123 (S. Marta).

Molothrus cassini, Finsch, P. Z. S. 1870, p. 576; Berlepsch, J. f. O. 1873, p. 250.

Molothrus robustus, Cab. MS. teste Finsch, *l. s. c.*

Similis *M. bonariensi*, sed crassitie majore et præsertim alis longioribus dignoscendus: long. tota 8·5, alæ 5·1, caudæ 3·9.

Hab. Venezuela and Colombia: Antioquia (*Salmon*); Santa Marta (*Simons*); Baranquilla (*Finsch*).

Mus. P. L. S. et S.-G.

7. MOLOTHRUS PURPURASCENS.

Xanthornus purpurascens, Hahn, Vög. aus Asien, Lief. v. t. 4 (?).

Molothrus purpurascens, Cassin, Pr. Ac. Sc. Phil. 1866, p. 20; Scl. P. Z. S. 1869, p. 148 (Lima); Scl. et Salv. Nomencl. p. 37; Tacz. P. Z. S. 1874, p. 523, et 1880, p. 200 (Peru).

Similis *M. bonariensi*, sed subtùs paulò magis nitens, rostro crassiore et pedibus fortioribus. *Fem.* Pallidè fusco-cinerea, subtùs valde dilutior et magis albicans quam in fem. *M. bonariensis*.

Hab. Western Peru: Lima (*Nation*); Callacate, Peru (*Stolzmann*).

Mus. P. L. S.

Notwithstanding what Mr. Cassin says, it must at least remain doubtful whether Hahn's figure was really intended to represent this form of *M. bonariensis*; but it is hardly necessary to change the name. On examining a pair of birds received from Lima (which must, I suppose, belong to Cassin's *M. purpurascens*), and comparing them with a series of *M. bonariensis*, I can find very little difference in the males, except that the bill and feet are rather stronger. The female of *M. purpurascens* is paler and more fuscous above, and very much paler and more whitish on the lower plumage.

8. MOLOTHRUS RUFO-AXILLARIS.

Icterus brevirostris, d'Orb. et Lafr. Syn. ii. p. 7 (1838)?

Molothrus rufo-axillaris, Cassin, Pr. Ac. Sc. Phil. 1866, p. 23; Scl. et Salv. P. Z. S. 1868, p. 140, et Nomencl. p. 37;

Hudson, P. Z. S. 1874, p. 161; Durnford, Ibis, 1877, p. 174; White, P. Z. S. 1882, p. 601.

Sericeo-niger unicolor, purpureo lavatus, in alis caudâque æneo tinctus; maculâ axillarium rubrâ; rostro et pedibus nigris: long. tota 8·0, alæ 4·5, caudæ 3·3. *Fem.* Mari omninò similis, sed crassitie paulò minore. *Avis jr.* Fusca, alis extùs rufo limbatis.

Hab. Argentine Republic: vicinity of Buenos Ayres (*Hudson*); Catamarca (*White*).

Mus. P. L. S. et O.-S.

9. MOLOTHRUS BADIUS.

Tordo pardo-roxizo, Azara, Apunt. i. p. 290.

Agelaius badius, Vieill. Nouv. Dict. xxxiv. p. 435, et Enc. Méth. p. 711.

Icterus badius, d'Orb. et Lafr. Syn. ii. p. 7 (Bolivia).

Molothrus badius, Cab. Mus. Hein. i. p. 192; Scl. Cat. A. B. p. 135; Hudson, P. Z. S. 1874, p. 163 (nesting); Scl. et Salv. P. Z. S. 1868, p. 140 (Buenos Ayres), et 1879, p. 608 (Bolivia), et Nomencl. p. 37; Durnford, Ibis, 1877, p. 174.

Dolichonyx badius, Cassin, Pr. Ac. Sc. Phil. 1866, p. 15.

Agelaius fringillarius, Darwin, Voy. 'Beagle,' Birds, p. 107.

Fuscescenti-cineraceus, subtùs dilutior; alis castaneis; primariorum apicibus et secundariorum parte mediali cum caudâ nigricantibus; rostro nigro; pedibus obscurè fuscis: long. tota 7·6, alæ 3·5, caudæ 3·0. *Fem.* Mari similis.

Hab. Buenos Ayres and Bolivia.

Mus. P. L. S. et S.-G.

10. MOLOTHRUS FRINGILLARIUS.

Icterus fringillarius, Spix, Av. Bras. i. p. 68, t. 65 (1824).

Molothrus fuscipennis, Cassin, Pr. Ac. Sc. Phil. 1866, p. 16.

Fuscus; loris et regione auriculari nigricantibus; alis extùs rufo limbatis; subtùs dilutior, magis ochraceus; caudâ nigricante fusco marginatâ; rostro et pedibus nigris: long. tota 6·8, alæ 3·5, caudæ 2·6.

Hab. Campos of Brazil: Minas Geraes (*Spix*); Ceara (*Cassin*); Pernambuco (*Forbes*).

Mus. P. L. S.

Obs. Præcedenti similis, sed caudâ fuscâ et colore corporis subtùs ochracescente distinguendus.

The only specimen of this interesting bird I have seen was presented to me by the late Mr. W. A. Forbes, but was not, I believe, obtained by himself.

Genus III. CYRTOTES.

Cyrtotes, Reichenb. Av. Syst. Nat. t. lxxiii. (1850): type *C. maxillaris*.

1. CYRTOTES MAXILLARIS.

Icterus maxillaris, d'Orb. et Lafr. Syn. Av. ii. p. 6; d'Orb. Voy. Ois. p. 367, tab. lii. fig. 1; Scl. et Salv. P. Z. S. 1879, p. 643.

Molothrus maxillaris, Cass. Pr. Ac. Sc. Phil. 1866, p. 21.

Cyrtotes maxillaris, Bp. Consp. i. p. 437.

Similis *Molothro bonariensi*, quoad colores, sed, sicut videtur, rostri formâ distinctus: mihi nondum obvius.

Hab. Cochabamba, Bolivia (*d'Orb.*).

Mus. Acad. Philadelph.

There is no specimen of this bird in European collections, so far as I know.

Genus IV. AGELÆUS.

Agelaius, Vieillot, Analyse, p. 33 (1816): type *A. phœniceus*.

Agelasticus, Cab. Mus. Hein. i. p. 188 (1851): type *A. thilius*.

Thilius, Bp. Compt. Rend. xxxvii. p. 33 (1853): type *A. thilius*.

Nesopsar, Scl. Ibis, 1859, p. 456: type *A. nigerrimus*.

Clavis specierum.

a. Niger: campterio discolore,	
campterio rubro, ochraceo marginato:	
fem. striata	(1) *phœniceus.*
fem. unicolor nigra	(2) *assimilis.*
campterio toto rubro	(3) *gubernator.*
campterio sanguineo, albo marginato	(4) *tricolor.*
campterio flavicanti-fulvo	(5) *humeralis.*
campterio flavissimo	(6) *xanthomus.*
campterio cum subalaribus flavis	(7) *thilius.*

b. Niger: fasciculo axillari flavo .... (8) *imthurni.*
c. Niger: campterio concolore,
caudâ rotundatâ .... (9) *cyanopus.*
caudâ quadratâ .... (10) *nigerrimus.*

1. AGELÆUS PHŒNICEUS.

Oriolus phœniceus, Linn. S. N. i. p. 161.

Troupiale à ailes rouges de la Lousiane, Daub. Pl. Enl. 402.

Agelaius phœniceus, Sw. Faun. Bor.-Am. ii. p. 280; Bp. Consp. p. 430; Baird, B. N. Am. p. 526; Baird, Brew., et Ridgw. B. N. A. ii. p. 159.

Sturnus prædatorius, Wils. Am. Orn. iv. p. 30, pl. 30.

Agelæus phœniceus, Sclater, P. Z. S. 1857, p. 205 (Mexico), 1859, p. 381 (Oaxaca), et Cat. A. B. p. 135; Scl. et Salv. Ibis, 1859, p. 19, et Nomencl. p. 37; Dresser, Ibis, 1865, p. 492 (Texas); Moore, P. Z. S. 1859, p. 58 (Peten); Coues, Pr. Ac. Sc. Phil. 1866, p. 90 (Arizona); Lawrence, Ann. L. N. Y. ix. p. 104 (Costa Rica); Coues, Key, p. 156, et B. N. W. p. 186.

Nigro-sericeus, alarum tectricibus minoribus ruberrimis, mediis ochraceis; rostro nigro; pedibus corylinis: long. tota 8·5, alæ 4·6, caudæ 3·5. *Fem.* Suprà nigra albido et brunneo striata; superciliis albidis; subtùs ochraceo-albida nigro striata et punctata; crassitie valdè minore.

Hab. North and Central America down to Guatemala and Costa Rica: Nicoya (*Arcè in Mus. S.-G.*).

Mus. P. L. S. et S.-G.

2. AGELÆUS ASSIMILIS.

Agelæus assimilis, Gundl. in Lembeye, Aves de Cuba, p. 64, t. 9. fig. 3 (1850); Gundl. J. f. O. 1856, p. 12, 1861, pp. 332, 413, 1862, p. 189, et 1874, p. 131, et Boston Journ. N. H. vi. p. 316; Poey, Rep. F.-N. i. p. 288 (1866).

Agelaius phœniceus, var. *assimilis,* Coues, B. N. W. p. 186.

Mas similis *A. phœniceo,* sed crassitie paulò minore. *Fem.* Nigra unicolor.

Hab. Cuba.

Mus. Com. de Berlepsch (♀).

3. AGELÆUS GUBERNATOR.

Psarocolius gubernator, Wagl. Isis, 1882, iv. p. 281.

Agelaius gubernator, Bp. Consp. p. 430; Baird, B. N. Am. p. 529; Sclater, P. Z. S. 1857, p. 213 (Orizaba), 1859, p. 365 (Jalapa), 1864, p. 175 (City of Mexico), et Cat. A. B. p. 135; Scl. et Salv. Nomencl. p. 37; Cooper, Orn. Cal. i. p. 263.

Agelaius phœniceus, var. *gubernator*, Baird, Brew., et Ridgw. B. N. A. ii. p. 163; Coues, Key, p. 156, et B. N. W. p. 186.

Similis *A. phœniceo*, sed maris campterio toto ruberrimo.

Hab. Pacific coast of North America and south to Southern Mexico.

Mus. P. L. S. et S.-G.

4. Agelæus tricolor.

Icterus tricolor, Aud. Orn. Biogr. v. p. 1 (1839); Nuttall, Man. i. (2nd edit.) p. 186.

Agelaius tricolor, Bp. Comp. & Geogr. List, p. 30; Aud. Syn. p. 141 (1839), et Birds Am. iv. p. 27, pl. ccxiv. (1842); Baird, Birds N. Am. p. 530 (1858); Baird, Brew., et Ridgw. B. N. A. ii. p. 165; Cooper, Orn. Cal. i. p. 265 (1870).

Agelaius phœniceus, var. *tricolor*, Coues, Key, p. 156, et B. N. W. p. 187.

Similis *A. phœniceo*, sed campterio sanguineo rubro, infrà albo aut lactescente albo marginato.

Hab. Coast-lands of Southern California.

Mus. P. L. S. et S.-G.

5. Agelæus humeralis.

Leistes humeralis, Vig. Zool. Journ. iii. p. 442.

Icterus humeralis, d'Orb. in La Sagra's Cuba, Ois. pl. 5.

Agelæus humeralis, Bp. Consp. p. 430; Gundl. J. f. O. 1856, p. 13, 1861, p. 332, 1874, p. 130, et 1878, p. 177; Pelzeln, Ibis, 1873, p. 28; Scl. Cat. Am. B. p. 136 (1862); Sclat. et Salv. Nomencl. p. 37 (1873); Poey, Repert. F.-N. i. p. 288.

Sericeo-niger, campterio toto flavicanti-fulvo; rostro et pedibus nigris: long. tota 7·0, alæ 4·2, caudæ 3·2. *Fem.* Mari similis, sed crassitie minore et campterio nigricante mixto.

Hab. Cuba.

Mus. P. L. S. et S.-G.

6. Agelæus xanthomus.

Agelaius chrysopterus, Vieill. Nouv. Dict. xxxiv. p. 539, et Enc. Méth. p. 713 (partim); Sund. Œfv. af K. Vet. Akad. Förh. 1869, p. 597; Gundlach, J. f. O. 1874, p. 312, et 1878, p. 177; Scl. et Salv. Nomencl. p. 37 (1873).

Icterus xanthomus, Scl. Cat. A. B. p. 131 (1862); Taylor, Ibis, 1864, p. 168; Bryant, Proc. Boston S. N. H. x. p. 254.

Hyphantes xanthomus, Cass. Pr. Ac. Sc. Phil. 1867, p. 63.

Nigro-sericeus, campterio flavo; rostro et pedibus nigris: long. tota 7·8, alæ 4·2, caudæ 3·4. *Fem.* (teste Gundl.). Mari similis, sed crassitie minore et campterio interdum nigricante mixto.

Hab. Portorico.

Mus. P. L. S. et S.-G.

The name *chrysopterus* cannot be conveniently used for this bird, as under his *Agelaius chrysopterus* Vieillot included *Icterus cayanensis* (Ibis, 1883, p. 359), and apparently also *Agelæus thilius*. The name has consequently been applied to all these three species.

7. Agelæus thilius.

Turdus thilius, Mol. Hist. Nat. Chili, p. 211.

Tordo negro cobijas amarillas, Azara, Apunt. i. p. 301.

Xanthornus chrysocarpus, Vig. P. Z. S. 1832, p. 3.

Agelaius thilius, Bp. Consp. p. 431; Scl. et Salv. Nomencl. p. 37; Durnford, Ibis, 1876, p. 159 (Buenos Ayres), 1877, p. 33 (Chupat), p. 174 (Buenos Ayres), et 1878, p. 394 (Chupat); Burm. La-Plata Reise, ii. p. 493; Cassin in Gilliss's U.S. Nav. Astr. Exp. ii. p. 179, t. 16. fig. 1; White, P. Z. S. 1882, p. 602 (Buenos Ayres).

Agelasticus thilius, Cab. Mus. Hein. i. p. 188; Sclater, P. Z. S. 1867, p. 323 (Chili), et Cat. A. B. p. 136; Scl. et Salv. P. Z. S. 1869, p. 153 (S. Peru); Cassin, Pr. Ac. Sc. Phil. 1866, p. 12.

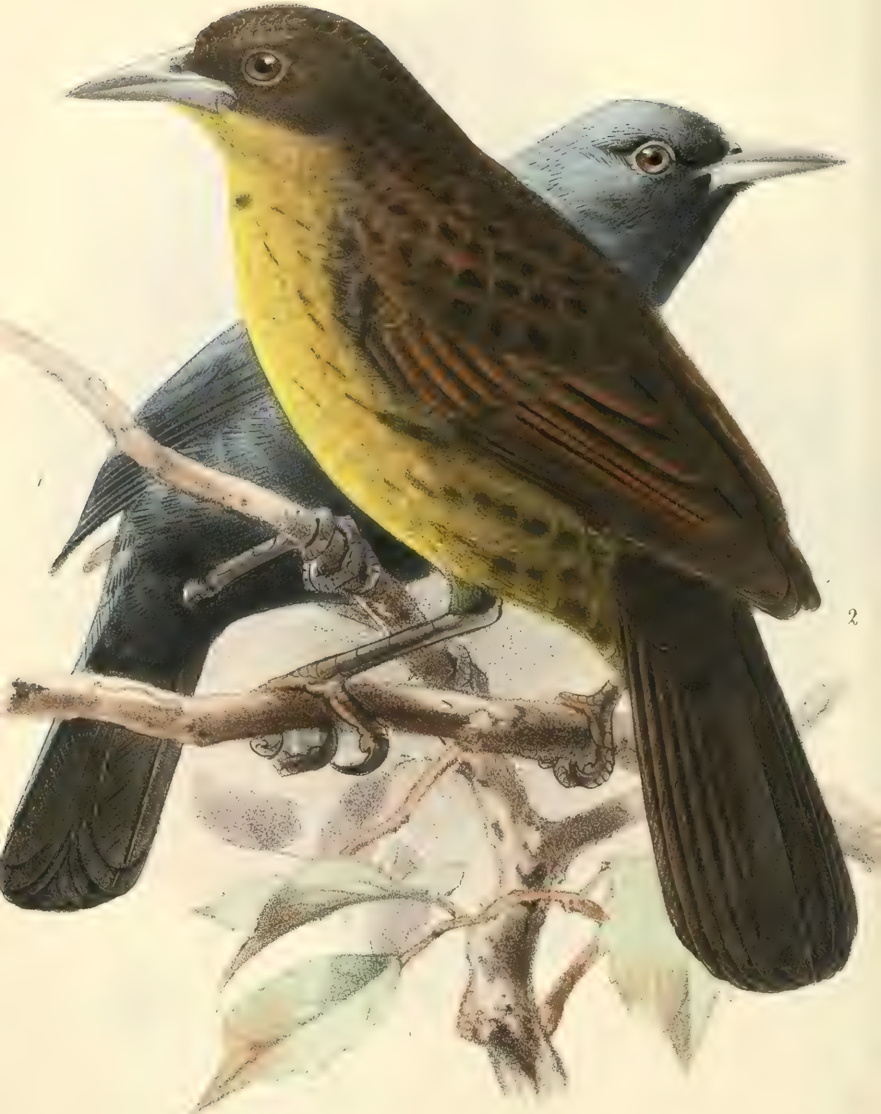
Agelaius chrysopterus, Cab. Mus. Hein. i. p. 180.

Cacicus chrysocarpus, Gay, Hist. de Chile, Zool. p. 345.

Xanthornus cyanensis, Gay, op. cit. p. 346 (Chili).

Icterus chrysopterus, d'Orb. et Lafr. Syn. Av. ii. p. 5.

Ibis 1884. Pl. I.



J. G. Keulemans lith. Hannart imp.

AGELÆUS CYANOPUS. 1, ♂ 2 ♀.

Xanthornus chrysopterus, Darwin, Zool. Voy. 'Beagle,' Birds, p. 106.

Agelæus chrysocarpus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 12.

Niger; campterio, tectricibus minoribus et subalaribus flavis: rostro et pedibus nigris: long. tota 5·5, alæ 3·6, caudæ 2·7. *Fem.* Fusca, nigro striata; superciliis et corpore subtùs fuscescenti-cineraceis, hoc nigricante striato.

Hab. Chili, Patagonia, and Buenos Ayres, north to Paraguay (*Azara*) and S. Peru (*Whitely*).

Mus. P. L. S. et S.-G.

8. AGELÆUS IMTHURNI.

Agelæus imthurni, Scl. P. Z. S. 1881, p. 213; Salvin et Godman, Ibis, 1883, p. 203.

Thilius major, Bp. C. R. xxxvii. p. 833 (1853)?

Nigerrimus unicolor; fasciculo plumarum axillari flavo; rostro et pedibus nigris: long. tota 10·4, alæ 5·0, caudæ rotundatæ rectr. med. 4·8, ext. 3·8. *Fem.* Mari similis.

Hab. Int. of British Guiana.

Mus. P. L. S. et S.-G.

Since I described this species Mr. Whitely has brought several specimens home from the Merumé Mountains. *Cf.* Salvin and Godman, *l. s. c.*

9. AGELÆUS CYANOPUS. (Plate I.)

Tordo negro y vario, Azara, Apunt. i. p. 313.

Agelaius cyanopus, Vieill. N. D. d'H. N. xxxiv. p. 552, et Enc. Méth. p. 719; Hartl. Ind. Azara, p. 5; Cassin, Pr. Ac. Sc. Phil. 1866, p. 12; Pelz. Orn. Bras. p. 196; Scl. et Salv. Nomencl. p. 37.

Icterus cyanopus, d'Orb. et Lafr. Syn. Av. ii. p. 5.

Leistes unicolor, Sw. An. in Menag. p. 305 (1838).

Niger unicolor; rostro nigro; pedibus (in pelle) obscurè fuscis; caudâ rotundatâ: long. tota 7·5, alæ 3·7, caudæ 3·0. *Fem.* Suprà fusca, nigro variegata; subtùs flavicanti-fulva præcipue ad latera nigricante striolata: caudâ nigrâ; remigibus extùs rufo limbatis.

Hab. Southern Brazil and Paraguay: Rio Paranà (*Natt.*).

Mus. P. L. S. et S.-G.

The figures (Plate I.) are taken from Natterer's specimens of both sexes of this bird in my collection.

10. AGELÆUS NIGERRIMUS.

Icterus nigerrimus, Osburn, in Zoologist, pp. 6661, 6714 (1859).

Nesopsar nigerrimus, Sclater, Ibis, 1859, p. 456, et P. Z. S. 1861, p. 74; Cat. A. B. p. 139; Scl. et Salv. Nomencl. p. 38.

Agelaius nigerrimus, Cassin, Pr. Ac. Sc. Phil. 1861, p. 12; Pelzeln, Ibis, 1873, p. 28.

Niger unicolor, æneo paulum splendens; rostro et pedibus nigerrimis; caudâ quadratâ: long. tota 8·0, alæ 4·0, caudæ 2·8, rostri a fronte 1·1. *Fem.* Mari similis, sed crassitie paulò minore.

Hab. in ins. Jamaica.

Mus. Bremensi et P. L. S.

Obs. Sp. a præcedente rostro elongatiore, caudâ quadratâ et colore feminæ unicolore diversa.

After reconsidering the question I am inclined to agree with Mr. Cassin that this species may be conveniently annexed to *Agelæus.*

Genus V. XANTHOCEPHALUS.

Xanthocephalus, Bp. Consp. i. p. 431 (1850): type *X. icterocephalus.*

1. XANTHOCEPHALUS LONGIPES.

Icterus icterocephalus, Bp. Am. Orn. i. p. 27, pl. 3 (*err.*).

Agelæus icterocephalus, Cab. Mus. Hein. i. p. 188.

Icterus xanthocephalus, Bp. Journ. Acad. Philad. ii. p. 222 (1826).

Agelaius xanthocephalus, Sw. Faun. Bor.-Am. ii. p. 281; Cassin, Pr. Ac. Sc. Phil. 1866, p. 11.

Agelaius longipes, Sw. Phil. Mag. 1827, i. p. 436.

Psarocolius perspicillatus, Wagl. Isis, 1829, vii. p. 753.

Xanthocephalus perspicillatus, Bp. Consp. i. p. 431.

Xanthocephalus icterocephalus, Baird, B. N. Am. p. 531; Scl. P. Z. S. 1864, p. 175 (Mexico), et Cat. A. B. p. 136; Scl. et Salv. Nomencl. p. 37; Dresser, Ibis, 1865, p. 492

(Texas); Coues, Key, p. 156, et B. N. W. p. 188; Baird, Brew., et Ridgw. B. N. A. ii. p. 167; Poey, Rep. F.-N. i. p. 288 (Cuba); Cooper, B. Calif. p. 267.

Niger; capite undique (nisi in loris et regione oculari) cum pectore superiore flavis; maculâ magnâ alari albâ; rostro et pedibus nigris: long. tota 9·0, alæ 5·5, caudæ 3·8. *Fem.* Crassitie minore et pileo nigro, superciliis solum flavis, necnon maculâ alari nullâ diversa.

Hab. Prairies of Western N. America from California and the Saskatchewan to Texas and S. Mexico: valley of Mexico (*White* and *l'Estrange*); Presidio, W. Mexico (*Forrer*).

Mus. P. L. S. et S.-G.

The name *icterocephalus* was applied to this bird by Bonaparte in error, under the belief that it was the *Oriolus icterocephalus* of Linnæus. It is therefore necessary to adopt the next oldest name.

Genus VI. XANTHOSOMUS.

Chrysomus, Sw. Class. Birds, ii. p. 274 (1837): type *X. icterocephalus.*

Xanthosomus, Cab. Mus. Hein. i. p. 189 (1851): type *X. icterocephalus.*

Erythropsar, Cass. Pr. Ac. Sc. Phil. 1866, p. 18: type *X. ruficapillus.*

Clavis specierum.

a. Pileo flavo,	
corpore subtùs nigro	(1) *icterocephalus.*
corpore subtùs flavo	(2) *flavus.*
b. Pileo castaneo,	
clariore	(3) *frontalis.*
obscuriore	(4) *ruficapillus.*

1. XANTHOSOMUS ICTEROCEPHALUS.

Oriolus icterocephalus, Linn. S. N. i. 163.

Chrysomus icterocephalus, Sw. Nat. Hist. Birds, ii. p. 274; Bp. Consp. i. p. 431; Sclater, P. Z. S. 1857, p. 18; Cab. in Schomb. Guian. iii. p. 681; Léotaud, Ois. Trinidad, p. 281.

Xanthosomus icterocephalus, Cab. Mus. Hein. i. p. 189; Scl. Cat. A. B. p. 136; Scl. et Salv. P. Z. S. 1866, p. 182 (Ucayali), 1867, p. 573 (Lower Amazons) et p. 978 (Pebas),

1869, p. 252 (Venezuela), 1873, p. 266 (Upp. Amazons), et Nomencl. p. 37; Taylor, Ibis, 1864, p. 84 (Trinidad); Wyatt, Ibis, 1871, p. 330 (Colombia); Pelzeln, Orn. Bras. p. 197 (Lower Amazons).

Leistes icterocephalus, Finsch, P. Z. S. 1870, p. 576 (Trinidad); Cassin, Pr. Ac. Sc. Phil. 1866, p. 14.

Niger; capite undique (nisi in loris) cum pectore superiore flavis; rostro et pedibus nigris: long. tota 6·7, alæ 3·5, caudæ 2·9. *Fem.* Suprà nigricans, pileo viridescente; superciliis et corpore subtùs flavicantibus, abdomine viridescente; lateribus et crisso fuscis.

Hab. Northern S. America from Colombia through Venezuela and Trinidad to the Guianas and Amazonia.

Mus. P. L. S. et S.-G.

2. Xanthosomus flavus.

Oriolus flavus, Gm. S. N. i. p. 389.

Tordo cabeza amarilla, Azara, Apunt. i. p. 299.

Psarocolius flaviceps, Wagl. Syst. Av. Suppl. sp. 9.

Chrysomus xanthopygius, Sw. An. in Menag. p. 345.

Xanthornus flavus, Darw. Zool. Voy. 'Beagle,' iii. p. 107, pl. 45; Hartl. Ind. Azara, p. 5.

Chrysomus flavus, Bp. Consp. i. p. 431; Burm. Syst. Ueb. iii. p. 267.

Xanthosomus flavus, Scl. Cat. A. B. p. 137; Scl. et Salv. P. Z. S. 1869, p. 632 (Buenos Ayres), et Nomencl. p. 37; Durnford, Ibis, 1878, p. 59.

Icterus flavus, d'Orb. et Lafr. Syn. Av. ii. p. 5.

Leistes flavus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 14.

Niger; uropygio et corpore subtùs cum campterio alari flavissimis; rostro et pedibus nigris: long. tota 8·5, alæ 4·2, caudæ 3·2. *Fem.* Fusca nigricante striata; superciliis, uropygio, campterio alari et corpore subtùs flavis.

Hab. Paraguay, Uruguay, and Argentine Republic: Maldonado (*Darwin*); Conchitas (*Hudson*).

Mus. P. L. S. et S.-G.

3. Xanthosomus frontalis.

Agelaius frontalis, Vieill. Nouv. Dict. xxxiv. p. 536, et Enc. Méth. p. 717 (Cayenne).

Agelaius ruficollis, Sw. An. in Menag. p. 302.

Chrysomus frontalis, Gray et Mitch. Gen. B. pl. 86; Burm. Syst. Ueb. iii. p. 267; Bp. Consp. i. p. 431.

Xanthosomus frontalis, Cab. Mus. Hein. i. p. 189; Scl. Cat. A. B. p. 136.

Dolichonyx frontalis, Cassin, Pr. Ac. Sc. Phil. 1866, p. 17.

Dolichonyx ruficapillus, Pelz. Orn. Bras. p. 199 (Paranà).

Sericeo-niger; pileo circumscripto et gulâ mediâ cum pectore castaneis; rostro et pedibus nigris: long. tota 7·5, alæ 3·7, caudæ 2·9. *Fem.* Fusca, nigro striolata, subtùs dilutior, in gutture et pectore magis flavicans.

Hab. Cayenne (*Mus. P. L. S.*); Ceará (*Mus. Acad. Phil.*); Pernambuco and Bahia.

Mus. P. L. S. et S.-G.

4. XANTHOSOMUS RUFICAPILLUS.

Tordo corona de canela, Azara, Apunt. i. p. 315, undè

Agelaius ruficapillus, Nouv. Dict. xxxiv. p. 545, et Enc. Méth. p. 712.

Trupialis ruficeps, Merrem, Ersch. u. Grub. Enc. xv. p. 282 (1826).

Chrysomus frontalis, Hartl. Ind. Azara, p. 5; Burm, La-Plata Reise, ii. p. 492.

Dolichonyx ruficapillus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 17.

Xanthosomus ruficapillus, Scl. et Salv. P. Z. S. 1869, p. 159 (Conchitas), et Nomencl. p. 37; White, P. Z. S. 1882, p. 602.

Similis præcedenti, sed colore castaneo obscuriore, neque ad pectus extenso.

Hab. Paraguay and Argentine Republic.

Mus. P. L. S.

Genus VII. AMBLYRHAMPHUS[*].

Amblyrhamphus, Leach, Zool. Misc. i. p. 82 (1814): type *A. holosericeus.*

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[*] In reference to the term *Xanthornus* I have stated (Ibis, 1883, p. 353) that *Xanthornus* was "first employed generically by Scopoli (Deliciæ,

Amblyrhynchus (err.), G. R. Gray, List of Genera, 1840, p. 41: type *A. holosericeus*.

1. AMBLYRHAMPHUS HOLOSERICEUS.

Le Troupiale rouge, Sonn. Voy. N. G. i. p. 113.

Xanthornus holosericeus, Scop. Del. Ins. ii. p. 88.

Oriolus ruber, Gm. S. N. i. p. 388; Lath. Ind. Orn. i. p. 179.

Tordo negro cabeza roxa, Azara, Apunt. i. p. 316.

Sturnella rubra, Vieill. N. D. xxxiv. p. 253, et Enc. Méth. p. 635.

Amblyramphus bicolor, Leach, Zool. Misc. i. p. 82, pl. 36; d'Orb. et Lafr. Syn. i. p. 8.

Sturnus pyrrhocephalus, Licht. Doubl. p. 18.

Amblyrhamphus ruber, Bp. Consp. i. p. 429; Burm. Syst. Ueb. iii. p. 263, et La-Plata Reise, ii. p. 491; Darw. Voy. 'Beagle,' Zool. iii. p. 109.

Amblyrhamphus holosericeus, Hartl. Syst. Ind. Az. p. 5; Cab. Mus. Hein. i. p. 190; Scl. Cat. A. B. p. 137; Scl. et Salv. P. Z. S. 1869, pp. 161, 632 (Buenos Ayres); Hudson, P. Z. S. 1870, p. 306; Durnford, Ibis, 1877, p. 174 (Buenos Ayres); Gibson, Ibis, 1880, p. 18 (Buenos Ayres); White, P. Z. S. 1882, p. 602 (Buenos Ayres).

Sturnella holosericea, Cass. Pr. Ac. Sc. Phil. 1866, p. 25.

Japus rubricapillus, Merrem, Ersch. u. Grub. Enc. xv. p. 281.

Niger; capite undique, collo et pectore cum tibiis ruberrimis; rostro et pedibus nigris: long. tota 9·5, alæ 4·5, caudæ 4·0. *Fem.* Mari similis.

Hab. Argentine Republic, Uruguay, and Paraguay; Maldonado (*Darwin*); vicinity of Buenos Ayres (*Hudson, Gibson*).

Mus. P. L. S. et S.-G.

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ii. p. 88) for his *Xanthornus holosericeus,* and would therefore be (strictly) synonymous with *Amblyrhamphus.*"

This is not correct. I now find that *Xanthornus* was first employed generically by Scopoli in 1777 (Intr. ad Hist. Nat. p. 481). No type is indicated, but reference is made to Browne, who used the term in his 'Nat. Hist. of Jamaica,' p. 477, for two species, which are apparently *Icterus vulgaris* and *I. leucopteryx.* I think, therefore, that we may consider *Xanthornus* of Scopoli (1777) a synonym of *Icterus* of Brisson (1760).

Genus VIII. GYMNOMYSTAX.

Gymnomystax, Reichenb. Av. Syst. Nat. t. lxxiii. (1850): type *G. melanicterus.*

1. GYMNOMYSTAX MELANICTERUS.

Oriolus mexicanus, Linn. S. N. i. p. 162.

Troupiale jaune à calotte noire de Cayenne, Daub. Pl. Enl. 533 (jr.).

Agelaius melanicterus, Vieill. Nouv. Dict. xxxiv. p. 544, et Enc. Méth. p. 711.

Icterus citrinus, Spix, Av. Bras. i. p. 69, pl. 66.

Psarocolius gymnops, Wagl. Syst. Av. sp. 14.

Gymnomystax mexicanus, Bp. Consp. i. p. 431.

Gymnomystax melanicterus, Cab. Mus. Hein. i. p. 189; Burm. Syst. Ueb. iii. p. 266; Scl. Cat. A. B. p. 137; Scl. et Salv. P. Z. S. 1866, p. 182, 1873, p. 267 (Ucayali), et Nomencl. p. 37.

Pseudoleistes melanicterus, Finsch, P. Z. S. 1870, p. 575 (Trinidad); Pelz. Orn. Bras. p. 197 (Para).

Leistes melanicterus, Cassin, Proc. Ac. Sc. Phil. 1866, p. 13.

Flavissimus; interscapulio et dorso inferiore cum alis et caudâ nigris; rostro et pedibus nigris: long. tota 9·5, alæ 5·0, caudæ 4·3. *Fem.* Mari similis. *Jr.* Pileo medio nigro insignis.

Hab. Cayenne and Amazonia: Para (*Natt.*); Yquitos, Peru (*Whitely*).

Mus. P. L. S. et S.-G.

Genus IX. PSEUDOLEISTES.

Pseudoleistes, Scl. Cat. A. B. p. 137 (1862): type *P. viridis.*

Clavis specierum.

Suprà nigricanti-olivaceus,
dorso postico flavo .... (1) *viridis.*
dorso postico concolore .... (2) *virescens.*

1. PSEUDOLEISTES VIRIDIS.

Oriolus viridis, Gm. S. N. i. p. 395.

El Guirahuro, Azara, Apunt. i. p. 290.

Agelaius guirahuro, Vieill. Nouv. Dict. xxxiv. p. 545, et Enc. Méth. p. 717.

Icterus guirahuro, d'Orb. et Lafr. Syn. ii. p. 4.

Icterus dominicensis, Licht. Doubl. p. 19.

Leistes suchii, Vig. Zool. Journ. ii. p. 192, pl. suppl. 10.

Xanthornus gasqueti, Q. et G. Voy. Uran. Zool. p. 110, pl. 24.

Leistes oriolides, Sw. An. in Menag. p. 303.

Leistes viridis, Hartl. Syst. Ind. Azara, p. 5; Bp. Consp. i. p. 436; Cab. Mus. Hein. i. p. 189; Burm. Syst. Ueb. iii. p. 264; Cass. Pr. Ac. Sc. Phil. 1866, p. 14.

Pseudoleistes viridis, Scl. Cat. A. B. p. 137; Scl. et Salv. Nomencl. p. 37; Pelzeln, Orn. Bras. p. 198; Reinhardt, Fuglef. Bras. Camp. p. 205.

Icterus atro-olivaceus, Wied, Beitr. iii. p. 1216.

Suprà nigricanti-olivaceus, dorso postico et tectricibus alarum minoribus flavis; subtùs flavus, gutture et pectore nigricanti-olivaceis dorso concoloribus; rostro et pedibus nigris: long. tota 9·5, alæ 5·0, caudæ 4·0. *Fem.* Mari similis.

Hab. Southern Brazil, San Paulo (*Natt.*); Minas (*Lund*); Corrientes (*d'Orb.*); Paraguay (*Azara*).

Mus. P. L. S.

2. PSEUDOLEISTES VIRESCENS.

El Dragon, Azara, Apunt. i. 296.

Agelaius virescens, Vieill. Nouv. Dict. xxxiv. p. 543, et Enc. Méth. p. 716.

Leistes virescens, Hartl. Syst. Ind. Az. p. 5; Cab. Mus. Hein. i. p. 190; Cassin, Pr. Ac. Sc. Phil. 1866, p. 15.

Icterus virescens, d'Orb. et Lafr. Syn. Av. i. p. 4.

Icterus anticus, Licht. Doubl. p. 19.

Leistes anticus, Bp. Consp. i. p. 436; Darwin, Zool. 'Beagle,' iii. p. 107; Burm. Syst. Ueb. iii. p. 265.

Pseudoleistes virescens, Scl. Cat. A. B. p. 137; Scl. et Salv. P. Z. S. 1868, p. 140 (Buenos Ayres), et Nomencl. p. 37; Hudson, P. Z. S. 1870, p. 549, et 1874, p. 156; Lee, Ibis, 1873, p. 132 (Buenos Ayres); Durnford, Ibis, 1877, p. 175, et 1878, p. 59 (Buenos Ayres); Gibson, Ibis, 1880, p. 31; White, P. Z. S. 1882, p. 602 (Punta Lara).

Nigricanti-olivaceus; tectricibus alarum minoribus, subalaribus et abdomine medio flavis; rostro et pedibus nigris: long. tota 9·5, alæ 4·6, caudæ 3·8. *Fem.* Mari similis.

Hab. Southern Brazil, Rio Grande do Sul (*Rogers* in *Mus. S.-G.*), Uruguay and Argentine Republic.

Mus. P. L. S. et S.-G.

Genus X. Curæus.

Curæus, Scl. Cat. A. B. p. 139 (1862): type *C. aterrimus.*

1. Curæus aterrimus.

Turdus curæus, Mol. Hist. Nat. Chili, p. 211.

Sturnus aterrimus, Kittl. Mém. Ac. St. Pét. 1834, p. 467, pl. 2.

Leistes niger, Sw. An. in Menag. p. 304 (1838).

Leistes curæus, Cab. Mus. Hein. i. p. 190; Cass. Pr. Ac. Sc. Phil. 1866, p. 15.

Psarocolius curæus, Bp. Consp. i. p. 425 Cassin, Gilliss's Exp. ii. p. 178, pl. xx.

Curæus aterrimus, Scl. Cat. A. B. p. 139, et Ibis, 1869, p. 283 (Cape Negro, Patagonia).

Niger unicolor; capitis plumis lanceolatis, angustatis; rostro et pedibus nigris: long. tota 11·0, alæ 5·4, caudæ 4·5.

Hab. Chili and Western Patagonia down to Magellan Straits.

Mus. P. L. S.

Genus XI. Leistes.

Leistes, Sw. Zool. Journ. ii. p. 191 (1826): type *L. guianensis.*

Clavis specierum.

Lineâ superciliari nullâ .... (1) *guianensis.*
Lineâ superciliari rufâ.......................... (2) *superciliaris.*

1. Leistes guianensis.

Oriolus guianensis et *Tanagra militaris,* Linn. S. N. i. pp. 162, 316.

Oriolus americanus, Gm. S. N. i. p. 386.

Agelaius militaris, Vieill. Gal. Ois. ii. p. 128, pl. 88.

Trupialis guianensis, Bp. Consp. i. p. 430; Burm. Syst. Ueb. iii. p. 260.

Pedotribes guianensis, Cab. Mus. Hein. i. p. 191.

Leistes guianensis, Scl. P. Z. S. 1857, p. 19 (Bogota) et p. 265 (Santarem), et Cat. A. B. p. 138; Scl. et Salv. P. Z. S. 1867, p. 573 (Para) et p. 750 (Xeberos), 1869, p. 252 (Venezuela), 1873, p. 267 (Xeberos), et Nomencl. p. 38; Salvin, P. Z. S. 1870, p. 191 (Veragua); Finsch, P. Z. S. 1870 (Trinidad); Taylor, Ibis, 1864, p. 84 (Trinidad); Layard, Ibis, 1873, p. 381 (Para).

Leistes militaris, Cassin, Pr. Ac. Sc. Phil. 1866, p. 14.

Leistes erythrothorax, Pelz. Orn. Bras. i. p. 197 (1871); Scl. et Salv. Nomencl. p. 38.

Fuscescenti-niger; campterio alari et corpore medio subtùs a mento ad medium ventrem coccineis; rostro nigro, pedibus clarè brunneis: long. tota 6·5, alæ 3·2, caudæ 2·3. *Fem.* Suprà cervina, nigro variegata, subtùs cervina coccineo tincta; lateribus et ventre imo nigro striatis.

Hab. Veragua and southwards over Colombia, Venezuela, Trinidad, Guiana, and Amazonia.

Mus. P. L. S. et S.-G.

Typical examples of *Leistes erythrothorax* of Pelzeln in my collection (obtained by Natterer on the Rio Madeira in 1829) scarcely differ from Guianan skins, except in slightly larger dimensions. I do not think them fairly separable.

2. LEISTES SUPERCILIARIS.

Tordo degollado tercero, Azara, Apunt. i. p. 309.

Leistes americanus, Hartl. Syst. Ind. Az. p. 5.

Trupialis superciliaris, Bp. Consp. i. p. 430.

Leistes superciliaris, Scl. Cat. A. B. p. 138; Scl. et Salv. P. Z. S. 1868, p. 140 (rep. Arg.), 1879, p. 608 (Bolivia), et Nomencl. p. 38; Cassin, Pr. Ac. Sc. Phil. 1866, p. 14; Hudson, P. Z. S. 1870, p. 333 (rep. Arg.); White, P. Z. S. 1882, p. 602 (rep. Arg.); Durnford, Ibis, 1877, p. 175 (Buenos Ayres); Forbes, Ibis, 1881, p. 339 (Pernambuco).

Fuscescenti-niger, superciliis pallidè fuscis; campterio alari et corpore medio subtùs a mento ad medium ventrem coccineis; rostro corneo; pedibus clarè brunneis: long. tota 7·0, alæ 4·0, caudæ 2·5. *Fem.* Pallidè fusca, suprà nigro variegata, subtùs coccineo tincta; ventre imo et lateribus nigro striatis.

Hab. Argentine Republic, Bolivia, and Brazil north to Pernambuco.

Mus. P. L. S. et S.-G.

Mr. Forbes's skins from Pernambuco belong decidedly to this species, which Mr. Cassin has already recorded as found at Ceará, North Brazil (Pr. Ac. Sc. Phil. 1866, p. 14).

Genus XII. TRUPIALIS.

Trupialis, Bp. Consp. i. p. 429 (1850): type *T. militaris.*
Pezites, Cab. Mus. Hein. i. p. 191 (1851): type *T. militaris.*

Clavis specierum.

Subalaribus albis: rostro longiore	(1) *militaris.*
,, ,, rostro breviore	(2) *bellicosa.*
Subalaribus nigris	(3) *defilippii.*

1. TRUPIALIS MILITARIS.

Sturnus militaris, Linn. S. N. i. p. 291.

Sturnus loyca, Mol. Chil. p. 225; Gm. S. N. i. p. 304; Lath. Ind. Orn. i. p. 235.

Magellanic Stare, Lath. G. H. v. p. 8.

Sturnella militaris, Vieill. Enc. Méth. p. 635; Gould, P. Z. S. 1859, p. 94; Sclater, P. Z. S. 1860, p. 385 (Falklands); Abbott, Ibis, 1861, p. 153 (Falklands); Cassin, Pr. Ac. Sc. Phil. 1866, p. 24; Scl. P. Z. S. 1867, p. 323 (Chili), 1868, p. 529 (Falklands); Scl. Cat. A. B. p. 138; Hudson, P. Z. S. 1872, p. 548 (rep. Arg.); Durnford, Ibis, 1877, p. 33, et 1878, p. 394 (Chupat).

Pezites loyca, Cab. Mus. Hein. i. p. 191.

Trupialis militaris, Bp. Consp. i. p. 429.

Nigra, fusco striata et variegata; superciliis elongatis albis; loris, campterio alari et corpore medio subtùs ad medium ventrem coccineis; rostro corneo; pedibus saturatè fuscis;

subalaribus albis: long. tota 10·0, alæ 4·7, caudæ 3·6. *Fem.* Mari similis, sed corpore medio subtùs pallidè isabellino, coccineo vix tincto.

Hab. Chili, Patagonia, and Falkland Islands.

Mus. P. L. S. et S.-G.

2. TRUPIALIS BELLICOSA.

Trupialis loyca, Bp. Consp. i. p. 429.

Pezites brevirostris, Cab. Mus. Hein. i. p. 191 (1851).

Sturnella bellicosa, De Filippi, Cat. Mus. Mediol. p. 32 (1846); Sclater, P. Z. S. 1858, pp. 455, 552, et 1860, p. 277 (Ecuador), 1869, p. 147 (Lima), et Cat. A. B. p. 138; Scl. et Salv. Nomencl. p. 38, et P. Z. S. 1867, p. 985 (Arequipa), 1868, p. 569 (Peru); Tacz. P. Z. S. 1874, p. 523 (Lima).

Sturnella loyca, Cassin, Pr. Ac. Sc. Phil. 1866, p. 25.

Leistes albipes, Wiegm. Arch. f. N. 1863, pt. 1, p. 128.

Similis præcedenti, sed rostro breviore, pectore coccineo non ad medium ventrem descendente et pedibus pallidis distinguenda.

Hab. Western Ecuador and Peru: Arequipa (*Whitely*); Island of Puna (*Buckley*).

Mus. P. L. S. et S.-G.

3. TRUPIALIS DEFILIPPII.

Trupialis defilippii, Bp. Consp. i. p. 429.

Sturnella militaris, De Filippi, Cat. Mus. Mediol. p. 32.

Trupialis militaris, Burm. Syst. Ueb. iii. p. 261, et Burm. La-Plata Reise, ii. p. 490.

Pezites militaris, Cab. Mus. Hein. i. p. 191.

Sturnella defilippii, Scl. Cat. A. B. p. 138; Scl. et Salv. P. Z. S. 1869, p. 161 (rep. Arg.), et Nomencl. p. 38.

Similis *T. militari,* sed crassitie minore et subalaribus nigris distinguenda.

Hab. Argentine Republic.

Mus. P. L. S. et S.-G.

Genus XIII. STURNELLA.

Sturnella, Vieill. Analyse, p. 34 (1816): type *S. ludoviciana.*

Pedopsaris, Gloger, Handb. p. 292 (1842): type *S. ludoviciana.*

1. STURNELLA LUDOVICIANA.

Sturnus ludovicianus, Linn. S. N. i. p. 290.

Cacicus alaudarius, Daud. Tr. d'Orn. ii. p. 325 (1800).

Sturnella ludoviciana, Sw. Faun. Bor.-Am. ii. p. 282; Bp. Consp. p. 429; Cab. Mus. Hein. i. p. 192; Scl. Cat. A. B. p. 139; Ibis, 1861, p. 178; Scl. et Salv. Nomencl. p. 38; Cassin, Pr. Ac. Sc. Phil. 1866, p. 23.

Alauda magna, Linn. S. N. i. p. 167; Wils. Am. Orn. iii. p. 20, pl. 191.

Sturnella magna, Baird, B. N. Am. p. 535; Coues, Key, p. 157, et B. N. W. p. 190; Baird, Brew., et Ridgw. B. N. A. ii. p. 174.

Sturnella collaris, Vieill. Gal. Ois. i. p. 134, pl. 90.

Fuscescenti-cervina, nigro variegata et transfasciolata; loris, campterio alari et corpore medio subtùs flavis; torque gutturali lato nigro; lateribus cervinis nigro striatis; rostro plumbeo, subtùs ad basin pallidiore; pedibus pallidè corneis: long. tota 9·5, alæ 5·0, caudæ 3·0. *Fem.* Mari similis.

Hab. Eastern States of N. America.

Mus. P. L. S. et S.-G.

This is one of the cases in which I think we may conveniently adopt a third term to express the slight local variations of size and plumage exhibited by specimens from different parts of the wide area over which *Sturnella* is distributed.

1*a*. STURNELLA LUDOVICIANA NEGLECTA.

Sturnella neglecta, Aud. B. Am. vii. p. 339, t. 487 (1843); Sclater, Ibis, 1861, p. 179; Dresser, Ibis, 1865, p. 492 (Texas); Cassin, Pr. Ac. Sc. Phil. 1866, p. 24; Cooper, B. Cal. p. 270.

Sturnella magna, var. *neglecta,* Coues, Key, p. 157, et B. N. W. p. 190; Baird, Brew. et Ridgw. B. N. A. ii. p. 176.

Simillima *St. ludovicianæ,* sed colore pallidiore et, sicut dicitur, voce omnino diversa!

Hab. Western States of N. America.

Mus. P. L. S. et S.-G.

1*b*. STURNELLA LUDOVICIANA HIPPOCREPIS.

Sturnella hippocrepis, Wagl. Isis, 1832, p. 281; Lawr. Ann.

Lyc. N. Y. vii. p. 266 (1860); Sclater, Ibis, 1861, p. 179, et Cat. A. B. p. 139; Scl. et Salv. Nomencl. p. 139; Cassin, Pr. Ac. Sc. Phil. 1866, p. 24; Gundl. J. f. O. 1856, p. 14, 1861, pp. 332, 413, 1862, p. 189, 1871, p. 276, 1874, p. 133.

Sturnella ludoviciana, var. *hippocrepis*, Baird, Brew., et Ridgw. B. N. A. ii. p. 172.

Similis *St. ludovicianæ*, sed crassitie minore et torque pectoris angustiore diversa.

Hab. Cuba.

Mus. S.-G.

1 *c*. STURNELLA LUDOVICIANA MEXICANA.

Sturnella hippocrepis, Sclater, P. Z. S. 1856, pp. 30, 301, et 1859, pp. 58, 365, 381; Sclat. et Salv. Ibis, 1859, p. 19, et 1860, p. 34 (Guatemala).

Sturnella mexicana, Sclater, Ibis, 1861, p. 179, Cat. A. B. p. 139, et P. Z. S. 1864, p. 175 (Mexico); Lawr. Ann. Lyc. N. Y. viii. p. 176 (Veragua).

Sturnella ludoviciana, Scl. P. Z. S. 1846, p. 142 (*David*); Salvin, P. Z. S 1867, p. 142 (Veragua); Lawr. Ann. Lyc. N. Y. ix. p. 104 (Costa Rica).

Sturnella magna, var. *mexicana*, Baird, Brew., et Ridgw. B. N. A. ii. p. 172; Coues, B. N. W. p. 190.

Similis *S. ludovicianæ*, sed crassitie minore et torque pectorali angusto distinguenda.

Hab. Mexico and Central America down to Veragua.

Mus. P. L. S. et S.-G.

1 *d*. STURNELLA LUDOVICIANA MERIDIONALIS.

Sturnella meridionalis, Sclater, Ibis, 1861, p. 179, et Cat. A. B. p. 139; Scl. et Salv. P. Z. S. 1868, p. 167 (Venezuela); Pelz. Orn. Bras. p. 198 (Rio Brancho); Cassin, Pr. Ac. Sc. Phil. 1866, p. 24.

Sturnella ludoviciana, Sclater, P. Z. S. 1856, p. 29 (Bogota); Salv. et Godm. Ibis, 1879, p. 201 (Santa Marta).

Sturnella hippocrepis, Finsch, P. Z. S. 1870, p. 575 (Trinidad).

Sturnella mexicana, Lawr. Ann. Lyc. N. Y. iii. p. 177 (Colombia).

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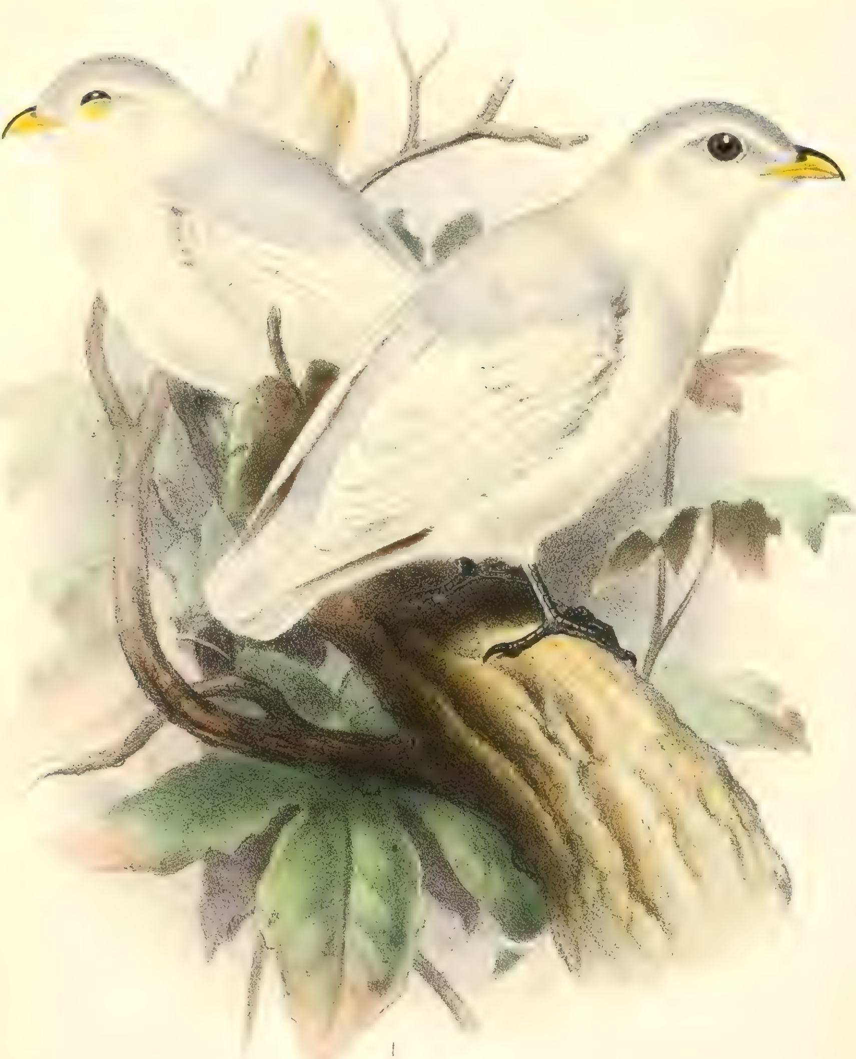
Ibis 1884. Pl. III.



J. G. Keulemans del. et lith. Hanhart imp.

CARPODECTES ANTONIÆ, ♂

Sturnella magna, var. *meridionalis,* Baird, Brew., et Ridgw. B. N. A. ii. p. 172; Coues, B. N. W. p. 191.

Similis *St. ludovicianæ* et crassitie æquali, sed torque pectorali angusto.

Hab. Llanos of Venezuela, Guiana, and Amazonia: Sierra Nevada of St. Marta (*Simons*); Caripé, Venezuela (*Goering*); Roraima Mountains (*Whitely*); Rio Brancho (*Natterer*).

Mus. P. L. S. et S.-G.

II.—*On a new* Carpodectes *from South-western Costa Rica.*

By Robert Ridgway.

(Plate II.)

The subject of the following description and accompanying Plate was received recently at the U.S. National Museum along with a small but very interesting collection of birds sent by Sr. Don José C. Zeledon, of San José, already known to science as an accomplished ornithologist and the author of a recent catalogue of the birds of Costa Rica[*].

Carpodectes antoniæ. (Plate II.)

Carpodectes antoniæ, Zeledon, MS.

Adult ♂ (No. 91832, Pirris, May 1883; Juan Zeledon collector). Similar to *C. nitidus,* but rather smaller, the bill mostly bright yellow, the wings wholly pure white, and crown much paler pearl-blue. Plumage pure white, except the forehead and crown (which are pale pearl-blue or glaucous), and back, scapulars, rump, upper tail-coverts, and tail (which are of a more delicate shade of the same). Bill clear lemon-yellow ("wax-yellow" in fresh specimens), with a distinctly marked black stripe along the culmen; "iris dark; feet black." Wings 5·40 inches, tail 2·60, culmen ·70, tarsus ·90, middle toe ·80.

This lovely species much resembles *C. nitidus,* except as pointed out above, but is clearly distinct. Mr. Zeledon's notes respecting it are as follows:—

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[*] 'Catalogo de las Aves de Costa-Rica,' por José C. Zeledon. San José, Costa Rica. Junio 1882. Imprenta Nacional. 8vo, pp. 39. (701 species.)

"You will be agreeably surprised to learn that I have made a most unexpected discovery in the shape of a new *Carpodectes*. The bird is snowy white, except on the back and top of the head, where a faint wash of grey is to be seen, all the back of the neck being pure white, like the rest of the body. No traces of the grey tinge are present on any other part of the plumage. The bill is somewhat smaller, less swollen, and more curved than in *C. nitidus*, and of a yellow colour, with a black line along the culmen to the very tip; the feet are black, not plumbeous, as in the latter species; the dimensions are pretty much the same, excepting that the tail is rather shorter than in *C. nitidus*.

"There is but one specimen in my possession, which was obtained by my brother Juan at Pirris, on the south-western side of Costa Rica. It is a fine adult male, and was procured in May last.

"*C. nitidus* has been obtained only on the eastern side of the country; I am inclined therefore to believe that the present species is the western representative of the genus.

"I have named this charming bird *Carpodectes antoniæ*, after a dear sister whose death I mourn."

III.—*On a new Species of Wryneck, discovered in Eastern Equatorial Africa by Dr. Emin Bey.* By Dr. G. Hartlaub.

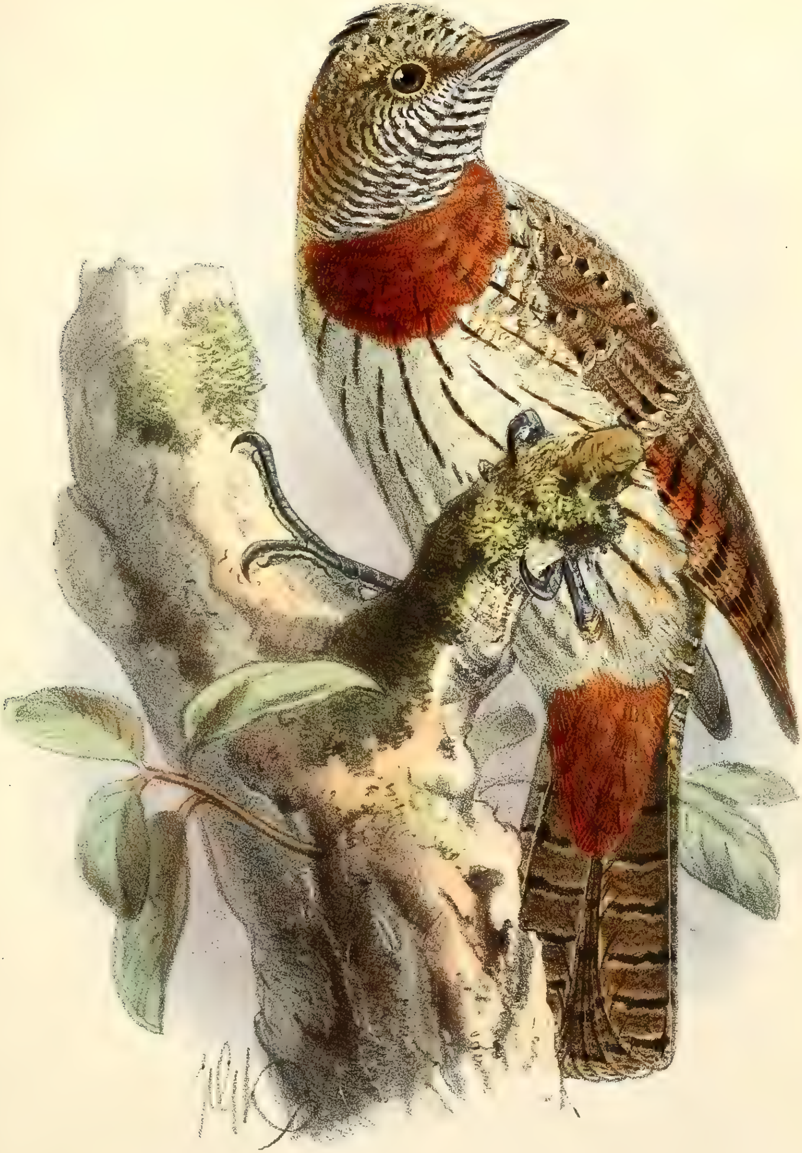
(Plate III.)

I have the pleasure of introducing to my brother ornithologists a new species of the restricted genus *Iynx*, lately discovered by my excellent correspondent Dr. Emin Bey, which I propose to call

Iynx pulchricollis, sp. nov. (Plate III.)

Supra in fundo griseo-rufescente maculis rarioribus, minutis, plus minusve triangularibus, postice cano marginatis, in collo postico fasciam longitudinalem irregularemque formantibus nigris ornata; pileo eodem modo fasciatim

Ibis.1884.Pl III



J.G.Keulemans lith. Hanhart imp.

IYNX PULCHRICOLLIS.

> maculato; regione parotica dilute rufa; tectricibus alarum remigibusque tertiariis dorso concoloribus, primariis in pogonio externo nigro rufoque fasciatis, in interno nigris, dimidio basali ex parte rufo, nigricante subfasciato; mento, gutture, capitis collique lateribus pulchre albo nigroque fasciatis; macula suprapectorali minore intense rufa; subcaudalibus læte rufis; subalaribus fulvis; abdomine subflavescenti-albido, confertim nigro striato; cauda rufescenti-brunnea, fasciis subangustis 7–8 nigris; uropygio et supracaudalibus dorso concoloribus, pulchre maculatis; rostro plumbeo-nigricante; pedibus plumbeis. Long. tot. circa 210 millim., culmen 16, alæ 94, caudæ 72, tarsi 20.

Iynx pulchricollis belongs to a singular little group of African Wrynecks, of which two other species of very similar appearance are known, *I. pectoralis*, Vig., from South Africa, and *I. æquatorialis*, Rüpp., from Abyssinia and Shoa. Both are rare in museums; but of the latter species there is a very fine male in the Bremen collection, and specimens of both sexes of *I. pectoralis* are in the Berlin Museum (*Krebs*, Caffraria), where I have compared them with my new species.

As to *I. æquatorialis* it will suffice to remark that the great extent of the rufous colour on the underparts, reaching from the chin to the abdomen, is quite sufficient to distinguish it from the new *I. pulchricollis.* Much nearer to it comes *I. pectoralis.* The principal differential characters between these two species are the following:—(1) In *I. pectoralis* the rufous guttural spot, in a gradually narrowing stripe, runs up to the chin, whereas in *I. pulchricollis* the whole fore neck (including the chin) shows very regular black and white fasciæ. (2) The under tail-coverts are deep rufous in *I. pulchricollis* and light fulvous in *I. pectoralis.* (3) The stripes on the abdomen are much broader and somewhat shorter in *I. pulchricollis.* (4) The beak is more slender and the culmen more curved in the latter species. (5) The bars of the tail are broader and much better defined in *I. pulchricollis* than in *I. pectoralis.* (6) The markings of the uropygium and the upper tail-coverts, nearly obsolete in *I. pectoralis,* are very elegant and conspicuous in *I. pulchricollis.*

(7) The form of the tail-feathers is different in the two species, these being much broader and more obtusely rounded at the tips in *I. pulchricollis*. (8) In *I. pectoralis* all the greater quills have very distinct and regular rufous spots or bars on their inner webs; in *I. pulchricollis* these spots are confined to the first quill; in the others the inner web is of a nearly uniform light rufous on its basal half, the bars being almost obsolete. (9) *I. pulchricollis* is altogether the larger bird.

There is no difference in the colour of the sexes of this species.

Dr. Emin Bey discovered this interesting bird in one of his excursions east of the Bar-el-Djebel. "All round Babira," he writes, "there is much cultivated ground, interspersed with groups of trees and fine park-like scenery. Here it was that this Wryneck, a pair of which I send, was observed early in the morning searching for ants. The birds are rather clumsy in their movements, awkwardly hopping about. They fly short distances only, the flight being undulatory. The note of the male is a repeated *dii-i*, which is answered by the female. They keep much on the ground. In rising they utter a sharp *zick*. Rare."

IV.—*Further Contributions to the Ornithology of Japan.*

By Henry Seebohm.

I am indebted to Capt. Blakiston for an opportunity of examining a case of birds from Japan containing some examples of very great interest. The order in which the species are placed in the subjoined notes upon this collection is that adopted by Messrs. Blakiston and Pryer in their article on the birds of Japan (Ibis, 1878, p. 209).

Brachyrhampus marmoratus.

A skin sent (No. 1269), labelled "♂, Hakodadi, May," appears to belong to this species. Its short tarsus, much shorter than the middle toe, and blackish plumage, marbled with buffish chestnut on the upper parts and with white on the underparts, distinguish it from its allies. It is, however, very large, as the following comparison of measurements shows, and may possibly prove to belong to a new species:—

	Wing.	Tail.	Culmen.	Tarsus.	Mid. toe and claw.
Hakodadi	5·75	1·7	1·5	·8	1·36
B. marmoratus (Coues)	5·00	1·5	1·35	·7	1·2

BRACHYRHAMPUS WRANGELI.

An example in the Swinhoe collection labelled "No. 1357, Hakodadi, ♀, May," was identified by Swinhoe (Ibis, 1875, p. 458) with *B. kittlitzi* of Brandt. It measures—wing 5·25, tail 1·4, culmen 1·3, tarsus ·7, middle toe and claw 1·3 inch. The upper parts are grey, most of the feathers tipped with pale grey, but many of them are dark brown with rufous tips. The underparts are very white, most of the feathers, especially on the breast and flanks, have dark brown tips. The under wing-coverts are nearly white. This specimen cannot be the adult of any of the species enumerated by Coues, since both the species mentioned by him as having short tarsi are said to have the under wing-coverts dusky brown.

A skin sent, labelled "No. 1918, Hakodadi, ♀, Nov.," appears to be almost adult. The measurements agree with those of the last-mentioned skin, except that the culmen measures 1·4. The upper parts are nearly uniform greyish brown, with much white on the scapulars. The underparts are white, except the flanks and axillaries, which are grey, and the inner wing-coverts, which are mottled grey and white. Probably the next moult would have brought it to the plumage described as *B. wrangeli.*

SIMORHYNCHUS PYGMÆUS.

The skin sent from Hakodadi (No. 3255) agrees fairly well with Coues's *S. microceros,* and another (No. 2291) from the same locality with the *S. pusillus* of the same author. Probably, as Dr. Coues suggests, the latter is the young of the former, in which case he is of opinion that Gmelin's name ought to be used.

COLYMBUS ADAMSI.

The skin sent (No. 3256) is an immature example of this species from Hakodadi, with a nearly white bill. A fine adult male was lately to be seen in the Fisheries Exhibition, collected by Baron Nordenskiöld in the Arctic Ocean.

ANSER CYGNOIDES.

The skin sent (No. 3247) from Yokohama is correctly identified.

ANSER HYPERBOREUS.

The skin sent (No. 3246) from Yokohama is correctly identified, the wing measuring 17¾ inches.

BERNICLA BRENTA.

The skin sent (No. 3239) from Yokohama belongs to the form of the Brent Goose (var. *nigricans*) with the black of the breast extending to the belly, and the white on the neck almost in a complete ring.

STERNA SINENSIS.

The skin sent (No. 3241) from Yokohama belongs to this species, which is new to Japan. The shafts of the primaries are white.

LARUS BOREALIS.

The skin sent (No. 2787) from the Kurile Islands is an example of the Arctic Herring-Gull, originally described * by Brandt from Siberia, and afterwards by Reinhardt from Greenland.

LARUS TRIDACTYLUS.

The skin sent (No. 2742) from the Kurile Islands is correctly identified.

STERCORARIUS CREPIDATUS.

The skin sent (No. 2696) from the Kurile Islands belongs to this species.

STERCORARIUS POMATORHINUS.

The skin sent (No. 1637) from Tokio Bay is an immature example of this species, which is new to Japan.

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* [Where is this original description published?—EDD.]

ATTAGEN MINOR.

The skin sent (No. 2751) from Hakodadi is correctly identified, the length of wing being 21 inches.

PROCELLARIA LEUCORRHOA.

The skin sent (No. 2748) from Yezo is correctly identified.

PROCELLARIA FURCATA.

The skin sent (No. 1819) from the Kurile Islands is correctly identified.

PUFFINUS GRISEUS.

The skin sent (No. 2695) from the Kurile Islands belongs to this species.

TEREKIA CINEREA.

The skin sent (No. 2793) from Yokohama is correctly identified.

TRINGA PLATYRHYNCHA.

The skin sent (No. 1486) from Hakodadi is correctly identified. Dresser is, I believe, in error in supposing that the East-Siberian bird differs from that of Europe.

MACHETES PUGNAX.

The skin sent (No. 1869) from Hakodadi is correctly identified.

PHALAROPUS FULICARIUS.

The skin sent (No. 2700) from the Kurile Islands is correctly identified.

SCOLOPAX NILSONI.

The skin sent (No. 1503) from Hakodadi may belong to this species, which has previously been recorded from Japan.

SCOLOPAX GRISEA.

The skin sent (No. 1707) from East Yezo is that of a female in first autumn plumage of this species. A second example was obtained at Yokohama in March, and from the description is an adult in winter plumage. This American species is an addition to the birds of Japan. It has occurred in North-east Siberia (Tacz. Journ. Orn. 1873, p. 112), and is included in the list of British birds, more than a dozen examples having been obtained in this country.

TRINGA SUBMINUTA.

TRINGA RUFICOLLIS.

Both these species pass along the coasts of China and Japan in spring and autumn, but I have not seen any examples of *T. minuta* from either of these countries. These three species are often confused together. *T. subminuta* may always be distinguished by its large feet. *T. ruficollis* in spring plumage may always be known by its chestnut throat and breast, and in winter plumage by the absence of chestnut margins to the two centre tail-feathers.

TRINGA CANUTUS.

The skin sent (No. 2794) from Yokohama is correctly identified.

NUMENIUS LINEATUS.

NUMENIUS CYANOPUS.

NUMENIUS VARIEGATUS.

NUMENIUS MINUTUS.

There are two Curlews and two Whimbrels in Japan. *N. lineatus* is the Eastern form of our Curlew, from which it is probably only subspecifically distinct. It differs from our bird in having the rump and axillaries pure white, characters which are very rarely met with, and possibly never united in European birds. It has also a longer bill, as the following measurements, in inches, of the culmen will show:—

	Females.	Males.
N. lineatus	8 to 6½	6 to 5½
N. arquatus	6¾ to 5¾	5½ to 4¾

N. cyanopus (*N. australis* and *N. rufescens* of Gould, and *N. major* of Temminck and Schlegel) is of about the same size, but differs from both forms of the Common Curlew in having the rump of the same colour as the back and upper tail-coverts. It varies enormously in the length of the beak, the culmen of males varying from 4½ to 6¾ inches, and of females from 7¾ to 8¼ inches.

N. variegatus, Scopoli (ex Sonnerat; *N. uropygialis* of Gould), is the Eastern form of our Whimbrel, and doubtfully distinct from it, having the rump streaked instead of white.

N. minutus is a miniature *N. cyanopus,* the wing measuring only 7½ instead of 12 inches in length.

IBIS PROPINQUA.

The skin sent (No. 1829) from Yedo is correctly identified.

BUBULCUS COROMANDUS.

The skin sent (No. 3215) from Tokio is correctly identified.

BUTORIDES MACRORHYNCHUS.

The skin sent (No. 2811) from Nagasaki is correctly identified. It seems doubtful if this species is distinct from *B. javanicus.*

ARDEOLA PRASINOSCELES.

The skin sent (No. 2677) from Hakodadi belongs to this species, which has not hitherto been recorded from Japan. It was described by Swinhoe from South China, but seems to be doubtfully distinct from *A. leucoptera.*

RALLUS BAILLONI.

The skin sent (No. 2717) from Yokohama is Baillon's Crake. It does not differ in size from European examples.

TETRAO BONASIA.

The skin sent (No. 3242) from Hakodadi is a typical Hazel-Grouse, neither the short-tailed pale Siberian form nor the rufous South-European form.

LAGOPUS MUTUS.

The skin sent (No. 3243), from an elevation of 9250 feet above the level of the sea, about a hundred miles to the north-west of Yokohama, on the main island of Japan (not from Northern Japan, as erroneously stated by Saunders, Yarr. Brit. B. iii. p. 86), appears to belong to the Common Ptarmigan.

TURTUR ORIENTALIS.

The skin sent (No. 2367) from Yezo belongs to this species, which has already been recorded from Japan by Whitely (Ibis, 1867, p. 204) as *T. rupicola,* and by Swinhoe (Ibis, 1874, p. 162) as *T. gelastes.*

CUCULUS HIMALAYANUS.

The skins sent (Nos. 2710, 2711) from Fujisan are the *C. himalayanus* of Vigors apud Jerdon. The wings measure 7·9 inches.

CUCULUS HYPERYTHRUS.

The skin sent (No. 2709) from Fujisan belongs to this species. It is the *Hierococcyx fugax* of Horsfield apud Blakiston and Pryer. It appears to me that the adult of this species is unknown. All the skins I have seen have longitudinal streaks on the underparts, such as are characteristic of immature birds of the *Hierococcyx* group of Cuckoos, to which it evidently belongs.

PICUS MINOR.

Three skins sent from Yezo are of typical *P. minor,* much darker on the underparts, and much more streaked, especially on the breast and flanks, than *P. minor* var. *pipra,* which ranges from Archangel to Kamtschatka. Two examples in my collection from the island of Saghalien, and one from the Altai Mountains, are paler underneath, but are streaked on the breast and flanks. A British example only differs from these skins from Yezo in having the flanks barred instead of streaked, a feature characteristic of *P. minor* var. *danfordi* from Asia Minor.

UPUPA EPOPS.

The skin sent (No. 2125), caught at sea off the south-east coast of Yezo, belongs to the typical form of the Hoopoe.

ZOSTEROPS JAPONICA.

A skin (No. 3250) bought from a native bird-dealer, and said to have been caught in the interior of the main island, is very large. It measures—wing 2·5 inches, tail 1·8, culmen ·77, tarsus ·76. The rufous on the breast and flanks is somewhat paler than usual.

CERTHIA FAMILIARIS.

The skin sent (No. 3182) from Sapporo is of the arctic or pale form known as var. *scandulaca*.

LANIUS MAGNIROSTRIS.

The skin sent from Fujisan, near Yokohama, belongs to this species, which is new to Japan.

LANIUS MAJOR.

The skin sent (No. 1097) from Hakodadi belongs to this species, which is also new to Japan.

BUTALIS SIBIRICA.

The skin sent (No. 2730) from Fujisan belongs to this species, which is also an addition to the fauna of Japan.

PARUS ATER.

Two females from Yezo are indistinguishable from European skins; but a male (No. 3178) from the same locality has a decided crest, and must be referred to var. *pekinensis*.

PARUS PALUSTRIS.

Two examples (Nos. 3131, 3132) from Yezo belong to the form known as var. *brevirostris*, as does also an example from the Kurile Islands (No. 2799).

ACREDULA ROSEA.

The skin sent (No. 2732) from Yokohama is indistinguishable from European examples, and can hardly claim to be called var. *trivirgata*.

ÆGITHALUS CONSOBRINUS.

A second skin of a male (No. 2543) and one of a female (No. 2544) from Nagasaki, in the south island of Japan, appears to prove that this species, of which the type described by Swinhoe from Central China is in my collection, is a good one, differing from *Æ. pendulinus* in having no chestnut on the breast, a darker head, and less chestnut on the back.

ACCENTOR RUBIDUS.

The skin sent (No. 2227) from Tokio, at no great distance from Yokohama, agrees with Temminck and Schlegel's figure in having no streaks on the flanks. Probably the *Accentor* *rubidus* var. *fervidus* (Sharpe, Cat. B. B. M. vii. p. 653), with streaked flanks, is confined to the north island of Japan.

ACCENTOR NIPALENSIS.

The skin sent (No. 2731) from Fujisan, not far from Yokohama, agrees with the remains of the type of *A. erythropygius* in the Swinhoe collection. This bird has recently been made (Sharpe, Cat. B. Brit. Mus. vii. p. 663) a subspecies of *A. alpinus*; but I cannot find that it differs in any particular from *A. nipalensis*.

ANTHUS LUDOVICIANUS.

Mr. Blakiston has sent a fine series of fifteen examples of *A. japonicus*, all of which are absolutely identical with American birds. One example is almost an exact duplicate of the bird figured in Swainson and Richardson's 'Fauna Boreali-Americana' (see Seebohm, Hist. Brit. B. ii. p. 248).

MOTACILLA BLAKISTONI, Seeb. Ibis, 1882, p. 91 *.

I have now a fine series of this excellent species of both sexes in summer and winter plumage, both adult and young. They all have more white on the basal half of the primaries, especially the three first, than can be found in any of the allied species. The male has a black back in summer, but females in both seasons and males in winter have the back grey mottled with black. The ear-coverts, cheeks, and sides of the neck are always white, and in adults the shoulders are black and the secondaries white, or nearly so. The throat is black in summer and white in winter, but the breast is always black.

MOTACILLA JAPONICA.

This species may be recognized in both sexes, at both seasons and at all ages, by its stout bill and by its never having the cheeks and ear-coverts white; they are black in adults and grey in the young. The only white on the head is the chin, forehead, and eye-stripe. In this species the back, throat, and breast of the male are always black, and of the female always dark grey. As in the preceding species, the shoulders are black and the secondaries white, but the first three primaries are only white on the outside half of the basal half of the inner web.

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* [See Ridgway, Proc. U. S. Nat. Mus. vi. p. 144.—EDD.]

MOTACILLA AMURENSIS.

This species appears also to be perfectly distinct from its allies, and may be always distinguished from the preceding two species by its grey shoulders and secondaries. In the distribution of the white on the three first primaries it agrees with *M. japonica.* The male in summer plumage has a black back, suffused with grey on the rump, but the male in winter and the female in summer have grey backs. The throat is black in summer and white in winter, but the breast is always black. The only species with which this bird is likely to be confused is *M. ocularis.* From this, however, it is perfectly distinct, with an entirely different geographical range. *M. amurensis* bears the same relation to *M. ocularis* that *M. yarrelli* does to *M. alba,* and is in every respect as distinct. The males can only be confounded in winter plumage, but the lighter slate-grey, especially on the rump, of *M. ocularis* is a sufficient distinction. The latter species is not found in Japan.

MOTACILLA SULPHUREA.

A series of Japanese examples vary in length of tail from 3·6 to 3·7 inches, and are therefore of the var. *melanope.*

MOTACILLA FLAVA.

A skin from Canton and another (No. 2781) from the Kurile Islands have the head dark olive-green, the eye-stripe yellow, and the ear-coverts dark brown, and are therefore of var. *taivanus.* An example from Hongkong collected by Jouy also belongs to this form.

CETTIA CANTANS.

CETTIA CANTILLANS.

Carefully sexed examples of these two species, collected by Mr. P. T. Jouy, of the Smithsonian Institution at Washington, about the centre of the main island of Japan, seem to prove that I was wrong in uniting them. It is curious that two species only differing in size should inhabit the same district; but they appear to vary in length of wing, as under—

	Males.	Females.
C. cantans	2·65 to 2·5	2·55 to 2·45
C. cantillans	2·2 to 2·15	2·15 to 2·05

CISTICOLA CISTICOLA.

There seems to be no doubt that the so-called *C. brunneiceps* is the summer plumage of the European Fantailed Warbler.

MEGALURUS PRYERI, nov. sp.

This is a most interesting addition to the fauna of Japan. The skin sent (No. P 5) was shot in Tokio, not very far from Yokohama. Its nearest ally is *M. gramineus* from Australia, but it differs from that species in having a shorter and more rufous tail, in having buff instead of white edges to the innermost secondaries, and in having no spots on the throat, breast, or under tail-coverts.

The general colour of the upper parts is chestnut-buff, each feather, except those of the forehead and rump, having an almost black centre, especially conspicuous on the back and innermost secondaries. The quills and tail-feathers are buffish brown, the latter with dark shaft-lines. The underparts are chestnut-buff, shading into pale buff on the centre of the throat and belly, and on the axillaries and under wing-coverts. Bill black above, pale beneath. Legs, feet, and claws pale. The bill is Phylloscopine, and the rictal bristles very small. The second primary is about equal to the ninth, and about twice as long as the first. The tail, of twelve feathers, is Locustelline, and has no trace of black subterminal spots. Length of wing 2·32, tail 2·32, tarsus ·8, culmen ·5 inch.

This bird (and its allies) might be placed in the genus *Lusciniola*. It is structurally the same as *L. thoracica*, but has the pattern of colour of *Megalurus*, and is so exactly intermediate between the two genera as to make it doubtful if they can be separated.

TROGLODYTES PARVULUS.

Three Wrens from the Yokohama district measure in length of wing from 2·1 to 1·85 inch, and are indistinguishable from European examples, except that the underparts are slightly darker and more rufous. The smaller ones are absolutely indistinguishable from examples from Vancouver's Island. An example from Hakodadi measures 2·1 inches in length of wing, and is slightly paler on the underparts. An example from the Kurile Islands is still paler underneath, but not quite so pale as European examples: it measures 2·15 inches in length of wing, and the culmen ·66 inch. Nothing can be more misleading than to dignify these climatic races with the rank of species. The Japanese Wren is known as *T. parvulus* var. *fumigatus*; but to distinguish it even as a variety from *T. alascensis* and *T. pacificus* can only be regarded as hair-splitting, the extremes in a series of any one variety overlapping the extremes of the nearest allied varieties.

MERULA CARDIS.

Among the examples sent of this species is one (No. 724) from Hakodadi of the young in first plumage, which was hitherto unknown. The general colour is brown, but most of the feathers of the upper parts have chestnut shaft-streaks and black terminal bands. The throat and upper breast are spotted like the lower breast and flanks. Axillaries chestnut.

MERULA CHRYSOLAUS.

An example (No. 723) from Hakodadi of young in first plumage is new. The general colour resembles that of the adult, but most of the feathers of the upper parts have chestnut shaft-streaks and black terminal bands, and on the breast and flanks are arrow-shaped black spots. Axillaries grey.

ALAUDA ARVENSIS.

The Sky-Larks of Japan differ in size as much as ours do, the wing varying in length from 4·9 to 3·9 inches. They are slightly more rufous than our birds, and might be called var. *japonica* by ornithologists anxious to split hairs. A smaller race, var. *cœlivox*, also occurs in Japan, having the wing varying from 3·7 to 3·2 inches.

EMBERIZA YESSOENSIS.

Three examples from Yezo prove the distinctness of this species, which was figured in 'The Ibis' for 1879, pl. i.

SYRNIUM URALENSE.

The skin sent (No. 3163) from Yezo is sexed a female, and dated October, but is no more rufous than examples from Krasnoyarsk (see Ibis, 1879, p. 180).

BUBO BLAKISTONI, Seebohm, nov. sp. P. Z. S. Nov. 20th, 1883.

It seems probable that the name of *B. maximus* must be erased from the list of Japan birds. The Owl which has hitherto done duty for this species in Japanese collections turns out to be almost generically distinct. The skin is dated Hakodadi, December.

General colour of the upper parts brown, marbled with buff, which takes the form of transverse bars on the wings and tail; all the small feathers with broad dark-brown shaft-streaks. Underparts similar, but the shaft-streaks narrower. Chin and upper throat white, with very narrow shaft-streaks. Ear-tufts well developed. Tarsus feathered, but toes entirely bare. Length of wing 22 inches, tail 11, tarsus 3·8, culmen 2·5.

This bird is probably the largest known species of Owl, and forms a connecting link between the genera *Bubo* and *Ketupa*. It is perhaps nearest to *B. coromandus*, but is much larger, and is without any trace of feathers on the feet.

SCOPS STICTONOTUS.

SCOPS JAPONICUS.

A series from Hakodadi of the grey form to the rufous form presents almost every intermediate stage, and shows that these supposed species are only phases of plumage of a variable species, probably climatic varieties.

SCOPS SEMITORQUES.

Males appear to measure 6 inches in length of wing and females 7 inches.

Aquila chrysaetus.

The skin sent (No. P 7) from Yokohama is a young bird of this species.

Aquila lagopus.

The skins sent (Nos. 2666 and 1371) from Hakodadi are Rough-legged Buzzard Eagles.

Circus spilonotus.

The skin sent (No. 1491) from Hakodadi appears to be a young male of this species. The thighs are white streaked with chestnut; the primary-coverts and the secondaries are very grey; and there are obscure bars on all the tail-feathers, except the two centre ones. Another skin (P 8) from the main island appears to be a female in first plumage. The thighs are dark chestnut-brown, but all the tail-feathers are barred.

Circus æruginosus.

Three examples from the main island of Japan are Common Marsh-Harriers, with almost white heads, unbarred tails, and dark chestnut thighs.

V.—*Notes on three Guatemalan Birds.*

By Robert Ridgway.

Having, through the kindness of Mr. Salvin, had the opportunity of examining the type specimens of the following species, it affords me much pleasure to offer a few remarks concerning them, my apology for doing so being that they possess peculiar interest to me on account of their relationship, real or supposed, to certain North-American forms with which I have been enabled to make a careful comparison of them.

1. Chrysomitris atriceps, Salvin, P. Z. S. May 1863, p. 190; Ibis, 1866, p. 194.

This very distinct species is apparently most nearly related to *C. spinescens*, Bp., of New Granada. The coloration is very similar, but the olive-green tips to the greater wing-coverts and margins of the tertials are much broader, and the lower parts of quite a different colour, being yellowish olive (in some specimens dull greyish) instead of bright oil-yellow. *C. spinescens* likewise has no dusky on the chin or throat, and has a proportionately much smaller bill.

With *C. notata* no comparison need be made, there being no close resemblance, except in the shape of the bill, which is similarly elongated and acute.

2. AMMODROMUS PETENICUS, Salvin, *ll. c.*

In general appearance this species resembles very closely the "*Coturniculus manimbe*, var. *dorsalis*" of Hist. N. Am. B. vol. i. p. 549, but is quite distinct. It differs in lacking the yellow supraloral spot, which in the present bird is greyish white, in having a distinct dusky line along each side of the throat, of which there is no trace in *C. dorsalis*, in the much paler yellow of the wing-edge, in the much darker colour of the lateral lower parts, and in the decidedly darker ground-colour of the dorsal surface. There are also other marked differences of coloration, but those mentioned are the most conspicuous. If the *Fringilla manimbe*, Licht., and its allies (*Coturniculus peruanus*, Bp., and the above-mentioned bird from the Argentine Republic, Uruguay, &c.) are rightly placed in the genus *Coturniculus*, the present bird would seem to belong there also, since it is very closely allied; but I doubt the propriety of referring any of these birds to either *Coturniculus* or *Ammodromus*, all the typical species of which are distinguished by their very narrow and finely acuminate rectrices.

3. SPIZELLA PINETORUM, Salvin, *ll. c.*

This species is far more closely related to *S. socialis* than to *S. pusilla*; indeed I cannot see why it should ever have been compared with the latter. The resemblance to *S. socialis* extends to all parts of the coloration, the pattern of which is identical in the two, but all the tints are much darker in *S. pinetorum*. Thus the crown is a very rich dark chestnut, much darker even than in the fully adult spring plumage of *Melospiza palustris*, while that of *S. socialis* is clear rufous, as much paler than the tint of *M. palustris* as the latter is paler than that of *S. pinetorum*. All the other colours are darker in about the same proportion, though the difference in the colour of the lower parts is far less great.

S. socialis has a similar reddish bill at some seasons, so it is quite possible that this member may become entirely black in midsummer specimens of *S. pinetorum*.

VI.—*On two new Species of Birds from Africa.*

By Captain G. E. Shelley.

On receiving Mr. Sharpe's seventh volume of the 'Catalogue of Birds,' I was enabled to feel confident that I had recently added to my collection examples of two species new to science. One I propose to name after Mr. R. Bowdler Sharpe, as a mark of the high merit I consider every ornithologist should recognize in his work.

1. Apalis sharpii, sp. n.

General plumage slate-colour, passing into brownish black on the entire head and neck. Sides of the body ashy grey, fading into white down the centre of the lower breast and on the under tail-coverts; axillaries and under wing-coverts white. There are only four feathers present in the tail of this specimen; three of these are narrowly tipped with buffish white. Bill black; legs rufous-brown. Total length 4·2 inches, culmen 0·45, wing 1·8, tail 1·8, tarsus 0·7.

Hab. Gold Coast.

Euprinodes schistaceus, Cass., appears to be the nearest ally of this species, from which it may be readily distinguished by the brownish-black colouring of the head and neck, the darker deep slaty grey of the back, and the absence of any olive shade.

2. Crateropus squamulatus, sp. n.

Upper parts brown, darker on the crown and nape, and gradually shading into black towards the forehead, where the feathers are narrowly edged with buffish white; the buff edges gradually become broader and browner towards the back of the crown, but remain of the same buffy white on the eyebrows and feathers bordering the ear-coverts. On the back and sides of the lower neck the pale margins to the feathers are only indicated towards their tips, and form obscure pale brown spots, which become almost obsolete on the mantle. Lower back and upper tail-coverts uniform brown, of a less ashy shade than in *C. plebeius* and *C. jardinii*. Wings and tail dark brown. Lores, cheeks, and ear-coverts black. Chin white, with broad subterminal black bars; throat dusky brown, with broad pale buff ends to the feathers; remainder of the underparts brown, less dusky than the throat, and slightly shaded with rufous towards the abdomen and under tail-coverts; the chest-feathers have pale shafts and partial buffish edges, more inclining to shaft-spots than on the throat. Under wing-coverts incline to rufous-buff, and the inner margins of the quills are partially of that colour. Bill black; legs dark brown; "iris golden yellow" (*Dr. Fischer*). Total length 8·7 inches, culmen 0·8, wing 3·9, tail 4, tarsus 1·25.

The type is labelled "♂, Mombassa, 23,7,77, Dr. Fischer," and has been incorrectly referred on the label to *C. kirki*.

C. reinwardti, Swains., appears to be its nearest ally, from which it may be distinguished by not having the crown uniform black, by the absence of dark centres to the feathers of the throat, by the darker colouring of the abdomen, thighs, and under tail-coverts, and by its smaller measurements.

I add a revision of the key to the genus *Crateropus* as restricted by Mr. Sharpe (Cat. B. Brit. Mus. vii. p. 469).

a. Bill not yellow.
  a^{1}. Head not white.
    a^{2}. Rump not white.
      a^{3}. Ear-coverts neither black nor brownish black.
        a^{4}. Feathers of the chin and throat lanceolate, and each one tipped with white.
          a^{5}. Larger; wing more than 4 inches, 4·3 to 4·5 .... 1. *jardinii*, Smith.
          b^{5}. Smaller; wing less than 4 inches, 3·6 to 3·85 .... 2. *kirki*, Sharpe.

- b^4. Feathers of the chin and throat not lanceolate, and with no spots on the chin.
  - b^5. With no black on the sides of the head.
    - b^6. The white spots on the throat and chest rounded, and more confined to the tips of the feathers; crown paler, the dark centres to these feathers being narrower and more lanceolate; the dark centres to the feathers of the mantle very obscure; the ear-coverts and cheeks generally brown .... 3. *plebeius*, Cretzschm.
    - c^6. The white spots on the throat and chest not so rounded, but inclining to form white margins to the feathers; crown darker, the pale edges to these feathers being more or less absent; the dark centres to the feathers of the mantle more distinct; the ear-coverts more ashy grey .... 4. *platycercus*, Swains.
  - c^5. With some black on the sides of the head.
    - c^6. Black on head confined to the space in front of the eyes and a narrow edging to the sides of the forehead.
      - c^7. Underparts paler; with no brownish-black centres to the feathers of the throat .. { 5. *melanops*, Hartl. / 6. *hypostictus*, Cab. & Reichen.
      - d^7. Underparts darker; with brownish-black centres to the feathers of the throat; chin white .... 7. *tenebrosus*, Hartl.
    - d^6. Ear-coverts black, and with black on the forehead.
      - d^7. Forehead and crown uniform black; with black centres to most of the feathers of the throat .... 8. *reinwardti*, Swains.

e^7. Forehead black, shading into brown towards the nape, and with buff edges to the feathers of the forehead; with no black centres to the feathers of the throat, which are tipped and edged with buff .... 9. *squamulatus*, Shelley.
b^2. Rump white .... 10. *hartlaubi*, Bocage.
b^1. Head white.
b^2. Breast and mantle brown.
b^3. Rump brown, only slightly paler than the back .... 11. *leucocephalus*, Cretzschm.
c^3. Rump white, contrasting strongly with the back .... 12. *leucopygius*, Rüpp.
c^2. Head, neck, and entire body white .... 13. *bicolor*, Jard.
b. Bill yellow.
b^2. Crown ashy grey, like the remainder of the head, throat, and crop .... 14. *atripennis*, Hartl.
c^2. Crown black, contrasting with the ashy-grey forehead, sides of the head, and throat; crop maroon-brown, like the breast .... 15. *haynesi*, Sharpe.

C. kirki is very closely allied to *C. jardinii*, but should, I consider, be kept specifically distinct.

C. plebeius, from N.E. Africa, has a very near representative in *C. platycercus* from W. Africa, where the latter is apparently represented by two races—one from the Gambia, the true *C. platycercus*, Swains., and the other from the Gold Coast, the *C. plebeius*, Hartl. (Orn. W.Afr. p. 79).

These two races only differ in the Gold-Coast specimens having the cheeks and ear-coverts more strongly washed with white, and in this respect closely agree with the figure given by Cretzschmar; the throat and breast in that figure best agree with the W.-African forms, while in the crown and mantle it most nearly represents the N.E.-African bird, for which there can be no doubt it is intended. Although these birds are closely allied, I think that the name *C. plebeius* should be kept for the N.E.-African, and *C. platycercus* for the W.-African form, and that the Gold-Coast race should not be separated from *C. platycercus*. *C. hypostictus*, Cab. &

Reichenow (J. f. O. 1877, pp. 25, 103), is only known to me by the description, and I have placed it next to *C. melanops*, on account of its having blackish-brown lores ("schwarzbraunen Zügel") and being referred to as very near *C. plebeius* (p. 25); but when I find it compared with *C. jardinii* (p. 103), I feel less certain of its true position in my key, as it may be a connecting-link between *C. kirki* and *C. melanops*. It would be a great advantage if all new species which are not accurately figured were very fully described, and a key given to show their natural position amongst their most nearly allied species.

Cretzschmar has scarcely received fair credit for his valuable 'Atlas,' which contains original descriptions and illustrations of many specimens collected by Rüppell in N.E. Africa, previously only known by the MS. names attached to the specimens by Rüppell.

VII.—*Introduction to Gould's 'Birds of Asia.'*

By R. Bowdler Sharpe*.

It having been suggested to us by Mr. Sotheran, the proprietor of the late Mr. Gould's Ornithological Works, that some few introductory remarks on the completion of the 'Birds of Asia' (one of the works left unfinished at Mr. Gould's death) would be acceptable to the Subscribers, we have attempted to give a brief outline of the history of Asiatic ornithology during the past thirty years. It is difficult for us, whose path has been smoothed by the labours of the excellent ornithologists who have devoted themselves to the study of oriental birds, to carry our minds back to the year 1850, when Mr. Gould commenced to write the present work on the Birds of Asia, at a time when such names as those of Hume, Blanford, Davison, David, Prjewalsky, Severtzoff, and Swinhoe were unknown to fame. In 1850 the golden age of ornithology was but commencing,

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* [Reprinted, by permission, from the concluding number of Gould's 'Birds of Asia,' recently issued.—Edd.]

'The Ibis' was not yet established, and such an idea as the calling into existence of a journal entirely devoted to Indian ornithology was undreamt of. Only one year previously had Gray completed his great work on the Genera of Birds, which tabulated and placed in order all the then known genera and species; and this was closely followed by the 'Conspectus Avium' of Prince Bonaparte and the 'Catalogue of the Museum Heineanum' of Dr. Cabanis. But although the three last mentioned works will always be celebrated for the order which they introduced into the Class *Aves*, their work did not affect Asiatic ornithology in particular, and the credit for first setting in order the ornithology of India rests with two naturalists—Jerdon and Blyth. Before Mr. Gould's work commenced, the former had finished his 'Catalogue of the Birds of the Peninsula of India,' while for many years Mr. Blyth had been engaged in publishing those important notes and synopses of Indian birds, in the 'Journal of the Asiatic Society of Bengal,' which even at the present day are studied with advantage by the ornithologist. Then, in 1849, appeared Mr. Blyth's 'Catalogue of the Birds in the Museum of the Asiatic Society,' wherein were incorporated the results of all his previous labours, as well as those of Jerdon. Another writer, Lord Arthur Hay, in future to be better known to the scientific world after his accession to the titles Viscount Walden and Marquis of Tweeddale, had also written one or two small papers on Indian birds; and Mr. Gould had himself published an illustrated folio work entitled 'A Century of Birds from the Himalaya Mountains.' A great change, however, had taken place in our knowledge of Himalayan birds since the day when it was considered of importance to figure one hundred species from this part of India. This was due to the exertions of Mr. B. H. Hodgson, the British Resident in Nepal, who as early as the year 1836 commenced to publish papers in which he introduced to the notice of naturalists some animals of the greatest interest from the hill regions of Nepal. His enormous collections were presented by him to the British Museum in 1843 and 1845, together with a complete set of native drawings, which are remarkable for their accuracy and give many details of the anatomy of the species figured. In 1844 Mr. Hodgson gave a complete catalogue of the Birds of Nepal in Gray's 'Zoological Miscellany,' founded on the above-named drawings and his own ample collections. In 1849 he again presented the British Museum with a collection of animals, and gave largely to the museums of other countries also, Blyth's 'Catalogue' testifying to his munificence as regards Calcutta. On his return to India his subsequent collections were given to the India Museum at Fife House; but after the closing of that establishment he again presented a large number of specimens to the British Museum, in 1859. Two lists of Mr. Hodgson's donations have been published by the Trustees of the last-named institution—one in 1846, and another in 1863.

In commencing to write the 'Birds of Asia,' Mr. Gould followed the majority of naturalists in treating the continent according to its political boundaries. In those days it must be remembered that Dr. Sclater had not revolutionized the study of ornithology by his division of the earth into natural zoo-geographical regions, nor had Mr. Wallace arisen to point out to us the demarcation between the Indo-Malayan and Austro-Malayan subregions, while the existence of a Mediterraneo-Persic subregion had not been forced upon the attention of ornithologists. We have not space here to discuss in detail the zoo-geographical divisions of the continent of Asia; but the natural divisions into which it is partitioned may be studied to advantage in two works—Mr. Wallace's 'Geographical Distribution of Animals,' and Captain Elwes's paper "On the Geographical Distribution of Asiatic Birds," published in the 'Proceedings of the Zoological Society of London' for 1873.

It will therefore be understood that, when the late Mr. Gould commenced his work, the area which he intended to embrace was a very large one; and it is not surprising that thirty-three years should have been insufficient to complete less than a quarter of the undertaking. Species from Palestine to the westward, and from the Moluccas to the east, have been figured in the 'Birds of Asia;' and it is equally certain that a larger number of new species have been discovered by ornithologists in the course of a year than were figured by Mr. Gould in the single part of the 'Birds of Asia' which he issued annually. It may not be uninteresting, however, to glance rapidly over the countries included in Asia by the author of the present work, and to estimate the increase of knowledge which has taken place since he commenced his gigantic task. Of the ornithology of Siberia but little was known up to the year 1850, beyond the writings of the old Russian travellers Pallas and Gmelin. Since the above-mentioned date, the explorations of Middendorff, of Schrenck, and of Radde have greatly increased our knowledge, while the travels of Dr. Finsch on the river Ob have added many interesting particulars respecting that region. One of the most important expeditions, however, to this portion of Northern Asia was that undertaken by our countryman Mr. Henry Seebohm, who in 1877 visited the valley of the Yen-e-say, discovered the breeding-places of many birds (unknown up to that date), and brought back large collections of animals from that little-known portion of the globe. His experiences and adventures are related in his work 'Siberia in Asia,' one of the most entertaining books of travel which it has ever been our lot to peruse. Central Asia remained for a long time a *terra incognita* to the naturalist; but about the year 1872 Dr. Severtzoff commenced to publish the results of his journeys through Turkestan, while at the same time the mission to Yarkand despatched by our government, under the leadership of Sir Douglas Forsyth, was also successful from an ornithological point of view; and the book 'Lahore to Yarkand,' published by Mr. A. O. Hume and Dr. Henderson the naturalist to the expedition, is full of interest to the ornithologist. South-western Asia, or at least that part of it embraced in the Mediterraneo-Persic subregion of modern writers, still requires considerable exploration before we can be considered to have a thorough knowledge of its ornithology. The birds of the Caucasus have been treated of by Ménétriés; and more recently Professor Bogdanoff has published a work on the species inhabiting this region, which, however, from being written in Russian, will, like Dr. Severtzoff's 'Fauna of Turkestan,' be unintelligible to the great majority of readers. Filippi's 'Viaggio in Persia' also contains a useful list of the birds met with by him; but by far the most important work on the zoology of Persia is that of Mr. W. T. Blanford, who has given a very complete account of the birds obtained by him during his travels from Baluchistan through Persia to the Caspian. This work on Eastern Persia also contains an account of the collections made by Sir Oliver St. John during his residence near Shiraz. When we come to Afghanistan we have the excellent observations of Captain Hutton on the Birds of Kandahar, published in 1845 and 1846, and the more scattered notices of the collections made by Dr. Samuel Griffith in the same country, as recorded by Messrs. Horsfield and Moore in their 'Catalogue of the Birds in the Museum of the East India Company.' Besides these there are some excellent papers by Colonel Swinhoe, Captain Wardlaw Ramsay, and Serjeant Barnes, which give an account of the birds observed by them during the last Afghan war.

As regards British India, we have already alluded to the state of its ornithological record up to the year 1850, when the labours of Blyth and Jerdon had done so much to prepare the way for the successful issue which has since uninterruptedly followed. Ceylon appears to have been the next place to be explored by working ornithologists; and Mr. E. L. Layard contributed in 1853 some very interesting notes on the birds of that country, supplementary to the catalogue published by Dr. Kelaart in his 'Prodromus Faunæ Zeylonicæ.' But in the year 1854 a most important work on Indian ornithology was issued, which we consider to have had a great effect upon the recent studies of ornithologists.

This was the 'Catalogue of the Birds in the Museum of the East India Company,' a work which bears on its title-page the names of Dr. Horsfield and Mr. F. Moore, but which is known to have been prepared entirely by the last-named naturalist. The importance of this Catalogue consists in the fact that it gathers together into one compass all the scattered literature of Indian birds which existed up to that period, and it is especially valuable as containing a connected list of references to Mr. Blyth's papers spread over many volumes of the Asiatic Society's 'Journal.' It must therefore never be forgotten that in that year ornithologists possessed for the first time a nearly complete literature of Indian birds, so far as Accipitres, Passeres, and Picariæ are concerned. A lull then appears to have taken place in Indian ornithology, broken only by occasional papers from Mr. Blyth, Colonel Tickell, and other field-naturalists, until the year 1862, when Dr. Jerdon brought out the first volume of his 'Birds of India.' This book, which was published in three octavo volumes, was completed in 1864; and, equally by naturalists at home as by field ornithologists in India, it has been recognized as the standard work on Indian ornithology. Many years must elapse before its utility will be impaired; and it is certain that every one writing on the birds of India has to take Jerdon's book as his starting-point. Mr. Blyth's able critique on this book in 'The Ibis' added considerably to its importance; and in 1872 Dr. Jerdon himself contributed a series of supplementary notes to the last-named journal: these have been duly recorded in a second edition of the 'Birds of India,' published under the superintendence of Colonel Godwin-Austen. A very interesting MS. work by the late Colonel Tickell, with beautifully painted pictures of Indian birds, has also been presented to the library of the Zoological Society of London.

If, however, Indian ornithology is indebted to an incalculable extent to the labours of Blyth and Jerdon, there is at least one naturalist whose claim to equal rank with the above-named pioneers will be admitted by every future historian of the subject. This is Mr. A. O. Hume, who for the past fifteen years has worthily trod in the footsteps of his renowned predecessors; and one cannot but regret that neither Blyth nor Jerdon have survived to see the results of their early studies as pushed towards such a brilliant conclusion by Mr. Hume. To attempt to write on Indian birds without consulting the pages of 'Stray Feathers,' which is the curiously chosen title of Mr. Hume's journal, would be as impossible as for any one to essay to write a history of Neotropical birds without referring to the works of Dr. Sclater and Mr. Salvin. Suffice it to say that Mr. Hume has succeeded in interesting a large number of ardent naturalists in a study of the birds of India; and although he has been singularly fortunate in the number and calibre of his coadjutors, the credit of the extraordinary advance which the study of Indian ornithology has made during the last twelve years is mainly due to the energy of Mr. Hume himself. Not only does his journal contain useful lists of species from various parts of the Indian peninsula, but important essays will be found therein on the ornithology of Yarkand, Afghanistan, Sindh, Tenasserim (occupying an entire volume of 524 pages), and the Malayan peninsula. In England, too, considerable energy has been shown in the study of Indian ornithology. Besides the uninterrupted issue of the 'Birds of Asia,' this country was indebted to the late Marquis of Tweeddale for many of the most valuable memoirs ever written on birds. His large collections and his intimate knowledge of ornithological literature rendered him the first authority on Asiatic ornithology in this country; and his untimely death was mourned by the entire scientific world.

The islands in the Bay of Bengal have been thoroughly explored on Mr. Hume's behalf by Mr. W. Davison, probably one of the best collectors that science has ever known; and it is to this same gentleman that we are indebted for very successful ornithological results in Tenasserim and the Malayan peninsula. Captain Wardlaw Ramsay has also largely contributed to our knowledge of the avifauna of the Andaman Islands. The history of the 'Birds of Ceylon' by Major Vincent Legge is simply a model work. Having resided in the island for seven years, he devoted his attention to its ornithology, and has published the results of his studies in a large quarto volume of 1237 pages.

No connected account has yet been published of the birds of Assam and the hills of North-eastern Bengal, such as the

Khasia, Naga, Garo, and Munipur hills. McClelland collected a certain number of specimens in Assam, which were presented by him to the India Museum, and are now in the national collection. They are most wretchedly preserved, and are without any indication of locality, sex, or date of capture. To Colonel Godwin-Austen we are indebted for scattered lists of the birds procured by him and his assistants during the surveys of the hill-ranges of North-eastern Bengal; and a connected account of the ornithological results obtained by these expeditions would be of the greatest assistance to students. These hill-ranges seem to have been well explored by Colonel Godwin-Austen, who has described some beautiful new species, and whose collection of birds from these localities is very extensive.

The province of Arracan is almost unknown as regards its ornithology. In 1875 the late Mr. Blyth prepared a list of the "Birds of Burmah;" but unfortunately his death prevented the publication by his own hands: it was, however, most ably edited by the late Marquis of Tweeddale [then Lord Walden], who not only added his own information on the subject, but included the birds recorded shortly before by Mr. Hume from Tenasserim, and the important collections made by Captain Wardlaw Ramsay in the State of Karen-nee. We have not yet alluded to the labours of an excellent naturalist in Pegu, Mr. Eugene W. Oates, who has quite recently incorporated the results of his former papers along with those of other field-naturalists in an admirable 'Handbook to the Birds of British Burmah.' This work gives a concise account of the author's own researches in Pegu, and of those of Mr. Davison and Captain Bingham in Tenasserim. We may refer to this work, one of the best of its kind ever written, as proving by the numberless instances in which Mr. Hume's name is quoted, the immense influence which he has exercised on Asiatic ornithology.

Here must be mentioned also the work by Dr. Anderson on the zoological results of the second expedition to Yunnan. Unfortunately this expedition did not succeed in penetrating further than the frontiers of that province; but many interesting observations were made during the brief stay of the above-named naturalist in Yunnan, and on the route traversed by the expedition through native Burmah. The ornithology of Cochin China is well represented in the Paris Museum; and Dr. Tiraud has published a useful list of the birds of that country.

With the ornithology of China the name of the late Consul Swinhoe will always be inseparably connected. Numerous contributions from his pen were published in 'The Ibis;' and two complete lists of the birds of China were issued in the 'Proceedings of the Zoological Society of London' for 1863 and 1871 respectively. In 1877, however, a very complete work on Chinese ornithology appeared from the pens of Père David and Dr. Oustalet, whose book, entitled 'Les Oiseaux de la Chine,' embodies not only Mr. Swinhoe's discoveries, but likewise the results of the travels of Père David throughout China as well as those of Colonel Prjevalsky in Mongolia and Thibet. A complete account of the ornithological observations made by the last-named traveller was also translated from the Russian, and published in the late Mr. Dawson Rowley's 'Ornithological Miscellany.'

We may here remark on the explorations of Dr. Dybowski and other Russian travellers in the region of Lake Baikal and Eastern Siberia, an account of which has been written by Dr. Taczanowski in the 'Bulletin' of the French Zoological Society. As regards Japan, there appeared in 1850 the beautiful illustrated work on the Fauna Japonica by Temminck and Schlegel, wherein are many fine pictures of birds, some of them drawn by Professor Schlegel himself, while others are early products of that great zoological draughtsman Joseph Wolf. After that but little was written on the ornithology of the Japanese Islands until 1867, when a list of the birds collected by Mr. Henry Whitely (since celebrated for his explorations in Peru and Guiana) appeared in 'The Ibis;' but more recently two good field-naturalists, Captain Blakiston and Mr. H. Pryer, have published a list of the Birds of Japan; and Mr. Seebohm has also devoted some attention to the ornithology of this part of Asia.

Lastly we have to consider the ornithology of the Indo-Malayan subregion. In 1854 a list of the birds of Malacca collected by Dr. Cantor was commenced by Mr. F. Moore. But the best accounts of the birds of the Malayan peninsula are those of Mr. Hume in 'Stray Feathers' (founded on the collections made by Mr. Davison in the western half of the peninsula) and of Lieut. Kelham in 'The Ibis.' Mr. Davison has proved by his researches that many of the Malayan birds range into Southern Tenasserim; and it is much to be regretted that this energetic collector has been disabled by the state of his health from exploring the eastern half of the Malayan peninsula, which is zoologically absolutely unknown. It will remain for some future explorer, therefore, to visit this dangerous and unknown region, when, as an ornithological result, it will doubtless be discovered that many species inhabiting the Eastern Himalayas and the hills of Burmah and Tenasserim extend their range to the mountains of Java and Sumatra along the elevated ridge which forms the backbone of the Malayan peninsula.

For our knowledge of the ornithology of Sumatra we are still mainly dependent upon the collections of the old Dutch travellers, Solomon Müller and others, who penetrated the mountain-ranges of the island; if we except the successful expedition made by Dr. Beccari in 1878, and the more recent researches of Mr. H. O. Forbes, lately recorded by Mr. F. Nicholson. The collections made near the coast, such as those of the late Mr. E. C. Buxton in Lampong, have mainly resulted in the procuring of common Malayan and Bornean forms.

But little has been written on the ornithology of Java. Horsfield's list of the birds procured by him, and subsequent observations by Dr. Bernstein, Mr. H. O. Forbes, and Mr. Vordeman comprise nearly all we know of the ornithology of the island; but rich collections are contained in the Leiden Museum, and the British Museum likewise possesses a good series prepared by Mr. Wallace, and by no means the least valuable result of that naturalist's expedition to the East.

With the ornithology of Borneo we are much better acquainted, thanks to the excellent work of Count Salvadori, the 'Uccelli di Borneo,' which contains a complete record of the avifauna of the island up to the year 1874. Since that date Mr. Alfred Everett and his brother Mr. Henry Everett in Sarawak, Mr. Hugh Low and the late Governor Ussher in Labuan and in the provinces of Brunei and Lumbidan, and Mr. W. B. Pryer in Sandakan, have added greatly to our knowledge of the birds of Borneo, and have shown that the relations of its avifauna are mostly with that of Sumatra and the Malayan peninsula, that few forms are peculiar to the island, and that it receives a considerable migratory influx of Siberian and Eastern Asiatic forms which make Borneo their winter home.

Our knowledge of the avifauna of the Philippine Islands has also been vastly increased since Mr. Gould commenced the present work. Many species had been recorded by Sonnerat and the older writers; but their accounts were often confused and meagre, and it was not till the late Mr. Cuming had visited the archipelago that British ornithologists received any definite and trustworthy information respecting the birds of the Philippine Islands. The Prussian expedition to Eastern Asia resulted in the publication of a list of Philippine birds by Dr. von Martens, which, however, was not very satisfactory; but the explorations of Dr. A. B. Meyer were of a more enduring importance, as it was principally on his collections that the excellent memoir on the Birds of the Philippine Archipelago by the Marquis of Tweeddale was founded. Following closely upon this, we ourselves published a list of the birds obtained by Dr. Steere, who visited many of the islands on which no naturalist had before set foot, and whose collections contained a large number of new forms. Perhaps the most interesting result of Dr. Steere's expedition was the demonstration that the Philippine Island of Palawan possessed a distinct Bornean and, therefore, Malayan element—a result which has been amply confirmed by Mr. Alfred Everett in the same island. The latter naturalist was sent by Lord Tweeddale; and his expedition has proved to be one of the most important ever undertaken in the Indian region. Like Dr. Steere he also visited many islands not before trodden by an ornithologist, and obtained a large number of beautiful novelties.

Such is a brief retrospect, as far as our experience allows us to make it, of the progress of oriental ornithology since the year 1850, when Mr. Gould issued his first part. Every one must admit that it would be far easier now to attempt such a work, although so vast is the extent of the Indian region that each year records a large increase in our knowledge of Asiatic birds. It would almost seem as if we had now once more reached a period of quiescence, such as supervened upon the publication of Horsfield and Moore's 'Catalogue' and Jerdon's 'Birds of India.' Let us hope that this is not the case, and that Mr. Hume, who has done so much for the increase of our knowledge of Indian birds, will not allow his pen to remain dry, that Colonel Godwin-Austen will, on the termination of his present important work on Indian Mollusca, be induced to give us a connected catalogue of the birds of North-eastern Bengal, that Captain Wardlaw Ramsay will publish a catalogue of the Tweeddale collection, and that Mr. Blanford will not allow his retirement from India to interfere with the publication of his useful works on the zoology of that portion of the globe.

VIII.—*Inauguration of the American Ornithologists' Union.*

On the 26th of September last, in pursuance of the notice reprinted in our last Number (Ibis, 1883, p. 580), a convention of American ornithologists was held in the Library of the American Museum of Natural History, New York, to organize an American Ornithologists' Union. We extract the following account of the proceedings on this important occasion from the 'Bulletin of the Nuttall Ornithological Club':—

"This call was sent to a little less than fifty of the more prominent ornithologists of the United States and Canada, selected mainly in reference to their scientific standing, but somewhat with regard to geographical representation, it being desirable to make the gathering as catholic and non-sectional as possible. Of the forty-eight persons invited, all but fourteen responded—in each case warmly favouring the project; there is reason to believe that in a large part of the remaining instances the persons invited failed, through absence from home or other cause, to receive the call. Twenty-five of those heard from expressed their intention to attend the Convention, and twenty-one were actually present. Following is a list of those in attendance, with the States whence they came:—Hon. Chas. Aldrich, Iowa; H. B. Bailey, E. P. Bicknell, D. G. Elliot, Dr. A. K. Fisher, Dr. J. B. Holder, Dr. E. A. Mearns, and Dr. C. H. Merriam, New York; C. F. Batchelder, W. Brewster, C. B. Cory, and H. A. Purdie, Massachusetts; Capt. C. E. Bendire, U.S.A., Oregon; N. C. Brown, Maine; M. Chamberlain, New Brunswick; Dr. E. Coues, Dr. D. W. Prentiss, and R. Ridgway, District of Columbia; T. McIlwraith, Canada; Dr. R. W. Shufeldt, U.S.A., Louisiana; Dr. J. M. Wheaton, Ohio.

"The Meeting was called to order by Mr. Brewster, and Dr. Coues and Mr. Bicknell were respectively elected temporary Chairman and Secretary. The original call for the Convention was then read, and also the list of persons to whom invitations had been sent, twenty-one of whom were present and responded. On the motion of Dr. Merriam, a Resolution was adopted to the effect that those who attended the Convention be declared Founders of the American Ornithologists' Union, and that this Union be declared to be hereby founded. A communication was then read by the Chairman from Professor Baird, expressing his hearty concurrence in the objects of the Convention, and his regret at being unable to be present. The Chairman then referred to the eminent standing as naturalists of both Professor Baird and Mr. Allen, and urged, notwithstanding their enforced absence—the one by pressing official duties, the other by physical disability—that these gentlemen, in view of their connexion with the initial steps of organization, be enrolled among the Founders, raising the number of Founders to twenty-three. A motion to this effect was unanimously carried. A provisional draft of a Constitution was presented by the Chair and read by the Secretary. On motion of Mr. Brewster it was re-read, discussed, voted upon section by section, and finally adopted as a whole. Subsequently one of the articles was reconsidered and modified. As finally adopted, its leading provisions are as follows:—Members are divided into four classes: (1) Active, limited to fifty in number, and to be residents of the United States or Canada; (2) Foreign, to be limited to twenty-five, and to be non-residents of the United States or Canada; (3) Corresponding, eligible from any country, and limited to one hundred; (4) Associate, to be unlimited in number, and residents of the United States or Canada. Eligibility to office and the right to vote are restricted to Active Members, whose annual dues are fixed at $5·00. Foreign and Corresponding Members are enrolled upon signifying acceptance of membership. Members of all classes are entitled to present papers and take part in scientific discussions.

"The Officers of the Union consist of a President, two Vice-Presidents, a Secretary and Treasurer (combined in one officer), and five Councillors, who together form a Council. These Officers are to be elected annually, at the stated meetings of the Union. Stated meetings are to be held each year, at such times and places as the Union may determine. Special meetings may be called by the Council as occasion may require. There is also a provision authorizing the Council to issue publications.

"Following the adoption of the Constitution, an election was held for Active, Foreign, Corresponding, and Associate Members, and for Officers for the ensuing year. To the list of Active Members represented by the Founders were added:—W. B. Barrows, G. B. Grinnell, and J. H. Sage, Connecticut; Prof. F. E. L. Beal, Iowa; J. Belding and Dr. J. G. Cooper, California; R. Deane and Prof. S. A. Forbes, Illinois; Col. N. S. Goss, Kansas; Prof. T. N. Gill, H. W. Henshaw, and Dr. J. H. Kidder, U.S.N., District of

Columbia; J. A. Jeffries, Massachusetts; Prof. F. H. King, Wisconsin; Dr. F. W. Langdon, Ohio; G. N. Lawrence and N. T. Lawrence, New York; Dr. J. C. Merrill, U.S.A., Montana; Dr. H. Nehrling, Missouri; E. W. Nelson, Colorado; T. S. Roberts, Minnesota; W. E. D. Scott, Arizona; Hon. G. B. Sennett, Pennsylvania; and W. E. Saunders, Canada. The number of Active Members was thereby raised to forty-seven.

"The election for Officers resulted as follows:—President, J. A. Allen; Vice-Presidents, Dr. Elliott Coues and Robert Ridgway; Secretary and Treasurer, Dr. C. Hart Merriam; Councillors, Prof. S. F. Baird, G. N. Lawrence, William Brewster, H. W. Henshaw, and Montague Chamberlain.

"The election of Foreign Members resulted in the choice of the following twenty-one scientists of eminence in ornithology:—Prof. J. V. Barboza du Bocage, Lisbon; Dr. Jean Cabanis, Berlin; Mr. Henry E. Dresser, London; Dr. Otto Finsch, Bremen; Dr. H. H. Giglioli, Florence; Dr. John Gundlach, Cuba; Mr. John Henry Gurney, Sen., Norwich, England; Dr. Gustav Hartlaub, Bremen; Mr. Allan O. Hume, Calcutta; Prof. Thomas Henry Huxley, London; Dr. Ferdinand Krauss, Stuttgart; Prof. Alphonse Milne-Edwards, Paris; Prof. Alfred Newton, Cambridge, England; Prof. William Kitchen Parker, London; August von Pelzeln, Vienna; Count Tommaso Salvadori, Turin; Mr. Osbert Salvin, London; Dr. Hermann Schlegel, Leyden; Dr. Philip Lutley Sclater, London; Mr. R. B. Sharpe, London; Mr. Alfred Russell Wallace, London.

"The following twenty Corresponding Members were elected, further elections in this class being deferred:—Count Hans von Berlepsch, Hesse, Germany; Capt. Thomas Blakiston, Hakodadi, Japan; Mr. Walter Buller, Wellington, New Zealand; Mr. Robert Collett, Christiania, Norway; Mr. J. J. Dalgleisch, Edinburgh; M. le Père Armand David, Paris; Mr. Percy Evans Freke, Dundrum, Ireland; Mr. F. DuCane Godman, London; M. Alfred Grandidier, Paris; Mr. John Henry Gurney, Jun., Norwich, England; Mr. J. Edmund Harting, London; Mr. J. A.

Harvie-Brown, Larbert, Scotland; Mr. J. Douglas Ogilby, Ireland; M. Emile Oustalet, Paris; Prof. J. A. Palmén; Mr. Harry Pryer, Yokohama, Japan; Mr. Howard Saunders, London; Mr. Henry Seebohm, London; Mr. Leonhard Stejneger, Alaska; Mr. Henry T. Wharton, London.

"Eighty-seven ornithologists of the United States and Canada were elected Associate Members.

"During the Session of the Convention, aside from the work of organization and elections, Committees were appointed by the Chair to take in hand the consideration of various important subjects, and to present reports upon them at the next Annual Meeting.

"The most important of these—'A Revision of the Classification and Nomenclature of North-American Birds'—was referred to a Committee of five, consisting of Messrs. Coues, Allen, Ridgway, Brewster, and Henshaw. A Committee was also appointed on the 'Migration of Birds,' to cooperate with Mr. W. W. Cooke in connexion with his work on this subject in the Mississippi valley, and consists of the following gentlemen, with power to add to their number:—Merriam, Brown, Purdie, Wheaton, Chamberlain, Grinnell, Henshaw, Cory, Merrill, Fisher, Bicknell, Mearns, and McIlwraith. A Committee on 'Avian Anatomy' consists of Shufeldt, Coues, Jeffries, and Merriam; another, on 'Oology,' of Bendire, Bailey, Brewster, Ridgway, and Merrill. A Committee was also appointed 'to investigate the eligibility or ineligibility of the European House-Sparrow in America,' consisting of Holder, Purdie, Chamberlain, Brown, and Bicknell, with power to increase its membership at its discretion. Finally, a sixth Committee was appointed to consider the subject of 'Faunal Areas,' on which were placed Allen, Ridgway, Bicknell, Merriam, Fisher, and Mearns.

"Resolutions of thanks were tendered to the Trustees of the American Museum of Natural History, for use of rooms during the Session of the Union and for other favours so courteously rendered; to Prof. A. S. Bickmore and Dr. J. B. Holder, for many kind attentions personally rendered to the Members; and to Mr. E. P. Bicknell, for his services on the

'Committee of Arrangements' for the Meeting and for the promptness and thoroughness with which he executed the duties of this position. A Resolution of thanks was also tendered the signers of the call, in their capacity as a 'Committee of Organization,' for their zeal and efficiency in issuing the call for the Meeting, as well as for the thorough and systematic preparation they were able to make for the speedy and satisfactory transaction of the business incident to the organization of the Union.

"The Session of the Convention occupied three days, and was marked throughout with the utmost harmony. At adjournment (subject to the call of the Council), hearty expressions of satisfaction with the results of the Session were heard from all who had shared in its deliberations. The general good-feeling rose to a degree of enthusiasm auguring well for the future work and prosperity of the Union, the organization of which under such auspicious circumstances cannot fail to mark an important era in the progress of Ornithology in America.

"As already stated, the matter of Publications was placed in the hands of the Council, by which body the subject was duly weighed after the adjournment of the Union. Naturally the question of an organ in the form of a serial publication was the first to present itself, and the impression was general that such a publication must prove indispensable to the work of the Union. It was accordingly voted to establish such a journal, its publication to begin January 1884. Mr. Allen was chosen editor, to be assisted by a staff of associate-editors, likewise selected by the Council, who are collectively to decide the character of the periodical, and to whom will be entrusted its management.

"It may be further announced in the present connexion that, upon this action being known, it became a question with the members of the Nuttall Ornithological Club whether the Nuttall Club should continue to publish an organ which, under the new conditions, could only be a rival of that of the Union. The two organizations being virtually one in interest and purpose (the later being to some extent an outgrowth of the earlier), and necessarily identical in membership in so far as can be the case where a greater includes a lesser, the Nuttall Club, at a meeting held October 1, voted to discontinue its 'Bulletin' with the close of the present volume, and to offer to the American Ornithologists' Union its goodwill and subscription-list—to place the 'Bulletin' in the hands of the Council of the Union, with its traditions and prestige, with the tacit understanding that the new serial of the Union shall be ostensibly a *second series* of the Nuttall 'Bulletin.' It is therefore to be hoped and expected that the many friends of the 'Bulletin' who have hitherto given it such hearty support will extend their allegiance to the new publication of the Union, freely contribute their observations to its pages, and use their influence to extend its usefulness."

IX.—*Rough Notes on Spanish Ornithology.*

By Abel Chapman.

(Plate IV.)

The following rough notes on Spanish ornithology are the result of observations extending over a period of some fourteen or fifteen months, at different times, in the Peninsula. They refer chiefly to Andalucia, where I spent two springs, and which province, from its geographical position between Europe and Africa, as well as from the richness and great variety of its natural features, is probably unsurpassed as regards its avifauna by any similar extent of ground in Europe.

I find the work of Spanish ornithology already so far advanced by Lord Lilford, Mr. Howard Saunders, and Col. Irby that, at least so far as the enumeration of native species goes, there remains little to be desired. Mr. Saunders (Ibis, 1871, p. 54 *et seq.*) and Col. Irby (Orn. Straits of Gibr.) have compiled accurate and comprehensive lists of the birds of Southern Spain, which, according to my observations, comprise all or nearly all those species which can be considered either indigenous or migratory to that country. No doubt more extended observations would result in some additions to their lists; but such could only or mainly, I think, be the accidental occurrences of stragglers from Africa or Eastern Europe. Therefore I now propose to supplement the work of the above ornithologists by notes of my personal observations of such species as I met with, arranged, as nearly as may be convenient, in the different years in datal sequence.

During two springs my "base of operations" was the city of Jerez de la Frontera, in Andalucia, and the first expedition to the Sierra de Jerez for a week's boar-shooting. This sierra, a spur of the Nevada range, at a point about thirty miles east of Jerez trends to the southward, and finally ends in our noble fortress of Gibraltar. Riding out, on the 26th of March, through the sandy vine-clad zone which surrounds the city of Jerez, the most conspicuous birds were the Black-start (*Ruticilla titys*), everywhere flitting about the hedges of cactus and prickly pear, and the Woodchat perched on the top-most lobe; up and down the tall flowering stalks of the aloe climbed Blue and Great Tits. Further out, on the plains of palmetto-scrub, our Common Stonechats and Wheatears of two species (*Saxicola aurita* and *S. stapazina*) abounded; but certainly the most numerous species was the Common Bunting (*Emberiza miliaria*). The number of this bird throughout Spain is incalculable; wherever one may be, there are the "Trigueros" in thousands, and their harsh monotonous scream is positively irritating in its ceaselessness. The Alaudidæ were also represented by many Calandra and Short-toed Larks; and along the sandy lanes the Crested Larks were busily dusting themselves. It is worth noting that our common Sky-Lark and Meadow-Pipit, and also the Song-Thrush, all of which are abundant in winter in Spain, had already proceeded north to breed; whilst *Turdus merula* and *Emberiza miliaria* are resident in that country. A few Redstarts were observed, and numerous lively flocks of Goldfinches flitted by. For several leagues in the vicinity of the sierra our course lay through undulating wooded plains of exquisite beauty. Here the characteristic species were Rollers, newly arrived, Southern Grey Shrikes, and

Black Kites, three or four of which were constantly soaring within sight, while the familiar notes of Cuckoo and Cushat reminded one of home.

Towards evening we entered the rugged defiles of the sierra, the towering ranges of which, surrounding us on every side, bore unmistakable evidence of their long struggles with glacial ice in bygone ages. Each tall slope consisted of a regular series of vertical bastions, or buttresses, extending nearly to the summit, and alternating with deep glens in singular uniformity. The conformation of these sierras recalled irresistibly to my recollection the distant valleys of Spitzbergen, where I have seen the power of ice in actual operation and carving out those dreary arctic hills after precisely the same pattern. Here, however, dense jungle had long taken the place of snow, and the wild boar now occupied strongholds where *possibly* the reindeer had once ranged in search of scanty lichen.

Of birds, the most conspicuous were the Griffon Vultures; in small parties of six or eight, these huge birds maintain an incessant surveillance of the sierras. In the short periods of our "drives" (perhaps an hour) I often noticed the same beat explored by two or even three parties. They hunt the sierras comparatively low, thus differing widely from the enormous altitudes at which their patrols search the plains. These Vultures breed gregariously; and in a high range of limestone-crags at the Boca de la Foz, a fine abrupt chasm separating the Sierras del Valle and de las Cabras, I reached several nests. They were moderately large flat structures of sticks, placed on narrow ledges in the face of the crags. None contained eggs on 28th March. The old birds, when shot, have a most offensive smell; their claws and long feathers are much abraded by attrition on the rocks, and their whole plumage has a worn and faded appearance in harmony with the decay and death in which they rejoice. Of other birds observed in the sierra in March, the Blue Thrush and Black Chat were abundant, several colonies of Rock-Martin (*Cotyle rupestris*, as well as such common species as Red-legged Partridge, Blackbird, &c. A pair of Golden

Eagles frequented the Boca de la Foz, apparently contemplating a nest there. In this chasm we killed a boar weighing 185 lb., and observed several wild cats and ichneumons. On the 31st a large arrival of Bee-eaters (*Merops apiaster*) took place.

About the end of March is a favourable season for Bustard-shooting. These birds abound in the great rolling corn-lands, where the wheat is at that time sufficiently grown to cover the hidden guns, but not these great birds when feeding —*i. e.* nearly girth-deep. Bustards feed morning and evening; from 10 A.M. till about 3 P.M. they lie down in the corn for a siesta during the heat of the day. It is then mere chance-work finding them; and to make sure of a shot it is therefore necessary to send men the night before, who mark the positions of the "bandadas," which are then driven according to wind and local conditions. The Bustards are in companies of from five to fifty, males and females together, and feed principally on the green blades of wheat, but are also very fond of the profusion of seeds which are ripening in those wildernesses of weeds which the Spanish farmer calls "manchon" or fallow. Habitually occupying much more land than he is able to cultivate, the Spanish farmer is thereby driven to adopt what he calls a "three-years' system," only raising a crop every third year; this leaves the remaining land to exhaust itself by a prodigious crop of weeds during two years. Thus two thirds of the productive power is wasted, and the "mano negra" and agrarian discontent flourish in lieu of corn, oil, and wine. The Bustard at least benefit by the "system," and the brilliancy and variety of the wild flowers are a wonderful sight.

The flight of the Bustards is strikingly powerful; they are not very "hard" birds, but have a keen eye for concealed danger in their course; and, as a rule, if one sees them coming they also have seen you, and at once sheer off. My friend Mr. W. J. Buck, of Jerez, who is a master of the art, has killed as many as fifty or sixty in a season. I do not think they are migratory, but shift their ground according to the season. I once saw seven of them in May in the heart of the Sierra de

Ronda, steadily winging their way high over those lofty peaks.

Towards the end of May the Great Bustards moult heavily, losing nearly all their quills together. They are then unable to fly, and to this circumstance is probably owing the traditional idea of their having formerly been coursed with greyhounds. Except at this season they could no more be killed in that way than could a Wild Goose. A magnificent old male was brought into Jerez, except for his wings, in beautiful plumage, and with the gorgeous chestnut ruff in perfect order.

There are not many other birds on these monotonous cornlands. A few Quails and Little Bustards, the usual hosts of Larks and Buntings, and now and then a Montagu's Harrier, mostly the handsome males*, looking almost white in the sunshine, are all one sees. I should not, however, omit the Storks, a pair of which frequent each "cortijo," where the female is then sitting on her eggs on the straw-thatched roof.

My next expedition was to the "marismas" of the Guadalquivir, lying to the westward of Jerez. We have in English no equivalent to the Spanish "marisma;" and the region is so peculiar, both physically and ornithologically, as to require a short description. If the reader will look at a map of Spain there will be noticed a large tract on the lower Guadalquivir totally void of names of villages &c. From Lebrija on the east to Almonte on the west, and from the Atlantic almost up to Seville itself, the map is vacant; this huge district is, in fact, a wilderness, and in winter the greater part of it is a dismal waste of water. For league after league, as one advances into its forbidding desolation, the eye rests on nothing but water—water meeting the sky all round the horizon. The Guadalquivir intersects the marisma, its triple channel divided from the adjacent waters by low mudbanks. The water of the marisma is fresh, or nearly so, quite drinkable, and has a varying depth of

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* Possibly some of these were *C. cyaneus* or *C. pallidus*, but those obtained were all of the above-mentioned species.

1 to 2 feet, according to the season. Here and there slight elevations of the muddy bottom form low islands, varying from a few yards to thousands of acres in extent, covered with coarse grass, thistles, and bog-plants, and frequented in spring by great numbers of interesting birds. As the hot weather sets in, the water gradually evaporates, and by the middle of June little remains but in pools. The marisma is then a vast flat plain of dry mud, scorched and cracked in all directions by the fierce summer sun. A coarse herbage springs up, and near the water-holes beds of rank reeds form the nurseries of the Heron tribe.

In winter the marisma abounds with wildfowl, chiefly Grey Geese, Duck, Wigeon, Pintail, and Teal. So great are their numbers that a class of professional gunners willingly pay a small rent for the privilege of shooting, and earn a subsistence thereby up to the end of March—this, too, although their artillery and appliances are of the most primitive description.

Early in April I spent eight or ten days in the marisma, cruising about in punts. The Geese and Wigeon had then entirely disappeared, but passage-Ducks were still numerous in large flights on the open water; these were principally Mallard, with Pochard and Pintail, and probably other species. The local-breeding Mallard were already in pairs along the rushy edges of the marisma, though not yet sitting. In addition to the species above named we obtained a Shoveller and several Crested Ducks. As late as 13th April I shot a Scoter drake (*Œdemia nigra*) on the Guadalquivir. These black ducks were very numerous in winter along the coast of Portugal. I was also shown, as a curiosity, a Cormorant which had been shot a day or two previously.

One cannot go far into the marisma without seeing that extraordinary fowl the Flamingo, certainly the most characteristic bird of the wilderness. In herds of 300 to 500, several of which are often in sight at once, they stand feeding in the open water, all their heads under, greedily tearing up the grasses and water-plants from the bottom. On approaching them, which can only be done by extreme caution, their silence is first broken by the sentries, who commence walking away with low croaks; then the whole five hundred necks rise at once to the full extent, every bird gaggling his loudest as they walk obliquely away, looking back over their shoulders as though to take stock of the extent of the danger. Pushing a few yards forward, up they all rise, and a more beautiful sight cannot be imagined than the simultaneous spreading of their thousand crimson wings, flashing against the sky like a gleam of rosy light. Then one descends to the practical, and a volley of slugs cuts a lane through their phalanx.

In many respects these birds bear a strong resemblance to Geese. Like them, Flamingos feed by day; and great quantities of grass &c. are always floating about the muddy water where a herd has been feeding. Their cry is almost undistinguishable from the gaggling of Geese, and they fly in the same catenarian formations. The irides of the oldest individuals are very pale lemon-yellow; the bare skin next the eye is also yellow, and the whole plumage beautifully suffused with warm pink. In the young birds of one year (which do not breed) this pink is entirely absent, and even their wings bear but slight traces of it. The secondaries and tertiaries of these immature birds are barred irregularly with black spots; and their legs, bills, and eyes are of a dull lead-colour. In size, Flamingos vary greatly; the largest I have measured was fully 6 feet 5 inches, while others (old red birds) barely reached 5 feet.

As we advanced into the marisma, bird-life became even more abundant. Besides the Ducks and Flamingos, flocks of long-legged Stilts fairly whitened the water, and members of the Heron tribe were conspicuous, principally, I think, Buff-backed Herons, Egrets, and Spoonbills. The latter, however, were very wild and restless, and all my efforts to get within reach failed. About the small mud-islands were immense flights of Dunlins in full breeding-plumage, smaller ones composed of Kentish Plovers and Lesser Ring-Dotterels mixed with Redshanks and Pewits, the two latter paired. Greenshanks and Knots I did not meet with then, though a month later (in May) I found both species, together with Whimbrels, Grey Plovers, and Curlew Sandpipers. On the 8th of April the Pratincoles arrived, and after that date they were abundant all over the dry mud and sand, feeding on beetles. Their beak has a very wide gape, which is bordered with a margin of deep vermilion. Sometimes twenty or thirty of these birds would cast themselves down on the mud all round one, and all lie down head to wind, much as a Nightjar squats on the sand. They resemble a Tern while standing, a Plover when running, and on summer evenings hawk after insects like a Swallow.

No Avocets were seen till April 13th, when I shot three out of a large flight. One of these was much smaller than the others and proved a male, the larger pair being male and female. This discrepancy in size appeared not unusual. They are singularly restless birds, active and sprightly in all their movements. Their cry is a short, sharp, "jerky" pipe; the Stilt's is a harsh croak. Both species fly with the long legs extended. The latter vary considerably in the disposition of black and white, especially on the head and neck. Some few have roseate breasts. The Stilts are surface-feeders, never putting their heads under; and as, owing to the extreme length of their legs, they cannot reach the ground with their bills, they necessarily feed in water about knee-deep. On the same day (April 13th) numbers of Little Terns (*Sterna minuta*) appeared, gracefully hovering over the weedy water. The larger Whiskered Tern (*Hydrochelidon hybrida*) had been frequently observed previously. Along the rushy edges of the marisma, bordering the Coto de Doñana, Buff-backed and Squacco Herons were numerous, the former frequently sitting on the backs of the half-wild cattle, where they resort to feed on the ticks and "warbles," as farmers call what, I believe, is the embryo gadfly. The Herons often appear fast asleep in this strange position, their heads snugly tucked under their back-feathers, their long toes and strong claws enabling them to sit thus securely. Scattered about in the shallow water were pairs of Little Egrets; these and the Squacco Herons seem to feed on the large water-beetles, often plunging their heads under water to catch them as they dive. Towards Rocio, where the reed-beds are very extensive, we met with the Purple Heron. I found a nest, with one egg, as early as 9th April; it was merely an armful of the tops of the long reeds bent down. This egg was longer and of a deeper shade than those of *Ardea cinerea*. About these reed-beds Little and Eared Grebes were tolerably plentiful, and Coots very numerous. The nests of the latter, floating in 4 feet of water, contained eggs as early as 31st March and furnished us with many a breakfast. The Grebes were only beginning to assume their summer plumage.

The night of April 10th I spent at Rocio, being rather tired of the cold and comfortless nights, *sub Jove*, in the marisma, where an upturned punt afforded but scant shelter from the piercing winds of the "small hours." It was hardly a change for the better, as a more miserable ague-stricken spot I never beheld, and in a Spanish "posada" man and beast are reckoned exactly equal in relation to the "accommodation" (?) they require. However, the four-league tramp through sandy scrub-covered plains was a relief from the monotonous marisma, and there were fresh birds for a change. Hoopoes and Golden Orioles were observed for the first time, and Rollers, Southern Grey Shrikes, and Turtle-doves abounded. A pair of Spotted Woodpeckers (? sp.) and a single Azure-winged Magpie were the only instances of their occurrence I have met with; the latter, however, is abundant further inland. It was near Rocio also that I obtained the Red-backed Shrike (*Lanius collurio*), which species had not previously been recorded in Southern Spain, though there is a specimen in the museum of Jerez, said to have been shot near that city.

The next bird obtained was a Great Spotted Cuckoo, and shortly afterwards, while sitting at lunch, a fine female Hen-Harrier (*Circus cyaneus*). This was the last I saw of this species, which does not remain to breed in the south of Spain. They are not uncommon in winter, and I frequently saw them while Snipe-shooting. On the morning of the 11th, at a wooded swamp called La Rocina, I shot a Black Kite and a female Booted Eagle, which passed within reach as she hunted the marsh. The next day I obtained a nest of the latter, built in the first fork of a big cork-tree, and containing one white egg.

April 10th. In the course of a long day's ride up the valley of the Guadalquivir I found seven or eight nests of the Egyptian Vulture on the cliffs which overhang that river. They were placed in holes in the face of the crags, and, from the rottenness of the rock, were mostly inaccessible; but eventually we reached two. The nests were made of rags and wool, no sticks, and were furnished with a most malodorous larder. In the first were two eggs, differing considerably in size and colour: the larger one was dull neutral brown; the other as richly marked as a Peregrine's. I took another handsome egg from this nest a month later. The bare skin on the face of these Vultures is bright orange-yellow, bill horn-colour, and legs flesh-colour.

In the highest crag of this ridge were a number of Griffons; but they were not nesting. None do so outside the sierra, the blue peaks of which lay some fifteen miles distant to the eastward. The large Vultures appear to use this cliff as a resting-place. In a lower part of the range a pair of Golden Eagles had had a nest, or rather nests, for there were two of them, which I was told they used alternately. The old Eagles had been shot; but I saw the nests, about forty yards apart—immense structures of sticks placed on ledges of the crag. These cliffs were also tenanted by a colony of Genets. Their lower slopes were now resplendent with acres of rhododendrons, just bursting into bloom. To-day a considerable arrival of Nightingales occurred; I have, however, seen them abundant by April 4th.

Beyond the marisma, on the west, lies the Coto de Doñana, a sandy well-wooded district, uninhabited, and abounding in game, both large and small. On 12th April, at the head of a small cavalcade provisioned for a ten-days' sojourn in those wilds, I set out thither, *viâ* San Lucar. Our first find was a nest of the Short-toed or (more appropriately) Serpent-Eagle, in a big stone-pine. This, like all the nests of this Eagle I have seen, was small, very thick in proportion to width, had a layer of dead leaves, and then a lining of twigs. This species invariably lays but one large white egg; hence probably the relative smallness of their nests. Below are always strewn many vertebræ of serpents. A female I shot had a snake over 4 feet long in her beak, only a few inches hanging outside; another had a rabbit; but snakes and large reptiles are their principal food. The former are very numerous, many reaching 6 feet in length; and I killed lizards exceeding 3 feet. The legs and feet of this Eagle are pale blue; flight buoyant, but rather unsteady; and they show very white from below. I also found this species nesting in mountain-forests in the sierra.

In the Doñana the Red Kite (*Milvus ictinus*) is rather numerous, and my first day's work (April 15th) yielded five or six of their nests: they were all built in the scattered cork-trees, and each contained two eggs—some fresh, others a good deal incubated. I was rather disappointed in the eggs of this fine species; several clutches were but faintly marked, and one was absolutely white. In each case I shot or trapped one or both of the old birds at the nest. In the males the beak was invariably yellow almost to the tip, whereas that colour in the females was confined to the cere, the rest of the beak being horn-colour. Their well-known habit of sticking a collection of gaudy rags and rubbish on the branches round the nest was very useful in saving many an unnecessary climb. No nest was worth going up to unless a rag or two fluttered in the breeze. In one case I found a dead and dried White Owl hung up; in others quills of Spoonbill and other birds, old match-boxes, &c. The Black Kite (*M. migrans*) is more numerous, but breeds later. I did not find their eggs till April 21st; and early in May, in the deliciously redolent pine-forest of La Marismilla, took a large series, shooting most of the old birds off their nests. Their eggs are fully as large and as richly marked as those of the Red Kite, from which they are quite undistinguishable. Neither species makes any lining to its nest; and only once in each case did I find the dual number of offspring exceeded, namely, *M. ictinus*, three young, May 2nd, and *M. migrans*, three eggs, May 10th. The latter appears to prefer the forests for nidification to the scattered trees, in which were most of the nests of *M. ictinus*.

On the wing the Red Kite shows a broad white band across the underside of the wings, caused by the basal half of the primaries being white below. In *M. migrans* this band is grey; the tail of the latter is also much less forked and is darker underneath*.

For capturing these and the other Raptores the circular steel traps were invaluable, being absolutely certain and saving much time. Besides, the miseries of a "puesto," or ambush, of one or perhaps even two hours' lying on the burning sand, awaiting the return of the old birds, were indescribable. A buzzing column of mosquitoes focussed themselves over one's face; tribes of black ants, like small dumbbells, and creeping things innumerable, penetrated up one's sleeves and down one's neck; while huge hairy spiders of hideous mien would gently lower themselves onto one's nose, just at the critical moment when it was essential to remain rigidly motionless.

The pine-forests also produced two or three nests of the Buzzard (*Buteo vulgaris*), each with three eggs. These nests and those of the Kites and Booted Eagle are hardly distinguishable from below, except that perhaps the last-named prefers the main fork while the others build out on the branches. In the crevices of these large nests are often placed the untidy grass-built edifices of the Spanish Sparrow (*Passer salicicola*). On April 21st a pair of Hobbies were observed frequenting a clump of pines, but no nest could be found.

Besides birds of prey, the scrub-covered plains swarmed with Magpies, many of whose nests we destroyed every day. By April 17th Red-legged Partridge, Cushat, and Mallard were all laying, and we frequently found the eggs of all three sucked by the first-named mischievous vermin. It is strange that the Jay, which is abundant in Portugal, should be entirely absent from these Cotos. During April and May the cock Partridge was very noisy, and frequently perched on a high stump or dead branch to sing its peculiar song. Among the cork-trees, pairs of Golden Orioles were making love in their peculiar fashion, the male hovering suspended in the air like a Kestrel; Woodchats scolded from every bush, and flocks of Bee-eaters gleamed like jewels in the sun. Turtledoves, which appeared on the 10th, were now scattered over the plains in very great numbers; every few yards a dozen or so would spring from the scrub, and dash away with impetuous flight. I found them very good eating; perhaps they accommodated themselves to my crude style of cooking better than other birds. None of these species have eggs till about the middle of May, though the equally brilliant Roller had already commenced laying*. Another bird characteristic of the scrub is the Stone-Curlew (*Œdicnemus scolopax*). On these flat plains they were difficult of access, and, if winged, ran like a hare. Towards evening they are very noisy, piping something like a Curlew in spring. On the night of April 15th, while skinning a lynx by the light of our fire, the air around seemed full of them, their vociferations resounding from the darkness on every side. I found the first nest, or rather a single egg, on the bare sand, on 18th April. Their footprints in the sand are rectilineal. These fine birds are resident, or at least are found throughout the winter. I have met with them in strange situations: high up on the barren stony mountains of the Minho, in Northern Portugal, flocks of them frequented the damp spots along the courses of the old Roman aqueducts. This was in November. Their local name there was "Mountain-Curlew" (Masarico de montes). Apropos of these hills the following rather strange incidents are perhaps worth noting:—Far out among the boulder-strewn ridges, while Redleg-shooting, I used to find numbers of Green Woodpeckers, miles away from trees; they were attracted thither by the swarms of ants. Many Nightjars (*Caprimulgus europæus*) and Little Owls also abode there; the latter fluttered out from under one's feet, and, after a most un-owlish up-and-down flight, would dive in under a big boulder, more like a fish than a bird. Small flights of Teal also resorted to these hills during the day, sitting among the heather, and returning to the marshes at night.

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* The Black Kite having recently been included in the British list, on the strength of an individual killed in Northumberland, I may mention that Mr. Hancock kindly showed me this specimen, which appeared to differ considerably from those killed in Spain. As far as it was possible to judge from examining it in the case, it appeared to me to be of a different species.

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* As late as May 9th I watched a pair of Golden Orioles to their nest in a tall "white elm;" but it was then only half finished.

To return to the Coto. April 17th produced a nest of *Lanius meridionalis,* its situation and construction resembling that of a Missel-Thrush. Many nests of the Spanish Green Woodpecker (*G. sharpii,* Saunders), which is one of the earliest breeders in Spain, now contained half-feathered young. I had already obtained their eggs early in the month. They are very numerous, and drill deep holes in the hard wood of the cork-trees. Their food consisting largely of ants and the small red and black beetles which cluster in nearly every crevice of the rough cork-bark, the characteristic "tapping" is seldom heard; but their loud maniacal laugh is incessant. One of these birds, shot as late as 10th May, dropped an undeveloped shell-less egg, from which I conclude they must breed twice. On one occasion, while examining a second hole, a foot or two above a thriving family of *Gecini,* a large stoat leaped out right in my face—strange neighbours!

The Hoopoe is another bird whose monotonous note is ever audible. Their flight, like the last-named species, is undulating; and when undisturbed their crest is depressed, projecting backwards. They are "fine-weather" birds, and during a shower of rain I have seen two or three of them creep into a crevice of a wall for shelter. These plains are infested with wild cats and badgers, also tall grey foxes of the "greyhound" breed. I shot one fox of the handsome dark variety or species, *Canis vulpes melanogaster.*

The Coto de Doñana contains many lakes, varying from mere rushy pools to extensive sheets of water, each occupied by a colony of water-fowl. On April 16th, riding up to the Laguna de Sopiton, several Mallards and Gadwalls flew off at our approach. I shot a drake of the latter from horseback, whereupon numerous small dark ducks rose from the reed-beds: their species was unknown to me; but as they appeared loth to leave, we soon shot several as they circled round high in the air, with rapid rustling flight, like that of a Golden-eye. They were the Ferruginous Duck (*Fuligula nyroca*), and were evidently breeding, though a search for their nests proved futile. A month later, however, I obtained nests of both this Duck and of the Gadwall, built among rushes on dry ground. The latter, which is inappropriately called "Silbon real" (*i. e.* King-Wigeon, or Whistler), is a very silent duck and was always seen in pairs. In May I met with them singly, those shot then being all drakes, rising from small rushy pools.

In the tall reed-beds in mid-water were numerous Warblers, notably the Great Sedge- and Reed-Warblers; but owing to the depth of mud and water and the rank weeds, it was not possible to reach the spot. Along the margin many of the little Fantail Warblers frequented the shorter rushes, on which they build their purse-shaped nests. I noticed this species throughout the winter. While driving the Ducks, five Glossy Ibises flew over, passing within shot of Felipe, my cazador, who, however, failed to stop them; they were the only birds of this species I met with in Spain. Among the reeds, floating in about three feet of water, was a nest of the Marsh-Harrier; it resembled that of a Coot, and had perhaps been built originally by that bird, many of which bred there.

That afternoon (April 16th) I found in a tall detached cork-tree a nest of the Imperial Eagle; it was placed on the extreme summit, and contained three down-clad young, pure white. Two days afterwards I found another nest, this time in a stone-pine; in it were two eggs, slightly incubated. They were almost pure white; but an egg from a third nest, taken on the 10th, was spotted with pale Indian red. This last-named nest also contained two eggs, but the second was broken by the "piñero" who took them. There are still a few pairs of this superb Eagle in the district, though their numbers are sadly thinned by the greed of collectors since I first met with them there in 1872. I obtained a pair of magnificent adults from their nest—their deep brown, almost black, plumage glossed with a fine purple metallic sheen and with snow-white shoulders. The cere and feet are pale lemon-yellow, and the irides finely reticulated with hazel; on the occiput is a patch of pale gold, the crown being black. The nests of these Eagles are about 4 feet across and invariably placed on the extreme summit of the tree, all projecting twigs being broken off so as to offer no impediment to the sitting Eagle's view. The lining consists of the green needles of the pine. These nests are most difficult to get into: from their position, affording no handhold above, and the extent to which they overhang, access can only be obtained by a manœuvre analogous to scaling the futtock-shrouds of an old line-of-battle ship.

With the first of the daylight the Eagles and most of the larger Raptores turn out for their morning hunt, and during the heat of the day enjoy a siesta on the peak of a lofty pine, where they remain conspicuously perched for hours together. Towards evening predatory operations are generally resumed. It is curious to observe their different methods of going to work: the Kites sweep about with buoyant desultory flight, not unlike large Gulls; the *Circaetus* wheels in wide circles over the *Cistus*-scrub; the Montagu's Harrier hunts, with impetuous flight, in long straight bee-lines, close over the "mancha," always appearing about to alight, but not doing so. But for systematic searching-out of his ground, none of them compare with the Imperial Eagle: usually in pairs, these noble tyrants choose a line of country, and with wide sweeps to right and left, crossing and recrossing each other at the central point like well-trained setters, they beat miles of scrub in a few hours; while a Buzzard or Marsh-Harrier will hover and circle round a single spot and spend half a day over a few acres of rushes. Nothing can well escape the Eagles: shortly, one of the pair detects the hidden game; for an instant his flight is checked, to assure a steady aim; then, with collapsed wings and a rushing sound, which is distinctly audible at a considerable distance, he dashes to the earth; a second or two later he rises with loud vociferations and a hapless rabbit suspended from his yellow claws. Their short sharp bark is repeatedly uttered while hunting. Rabbits seem to constitute nine tenths of their prey, to judge from the Golgotha of these little animals' skulls below the nests. I also saw a Partridge brought thither, and remains of a Stone-Curlew and other birds.

In the beautiful gardens of El Palacio at Jerez, the Goldfinches already (April 29th) have young; so, too, have the Common Sparrow, and several broods of Blackbirds are already flown from their nests in the orange-trees. The Nightingales' nests were only about half built, and no eggs were laid till 8th May. Many of their nests were in ivy growing on walls, and placed four or five feet from the ground. Their eggs varied from light olive-green to dark bronze. The Willow-Wren family have now entirely disappeared from the garden.

On April 23rd, 1872, I found near Jerez an egg of the Cuckoo (*Cuculus canorus*) in a nest of the Stonechat, together with four eggs of the latter bird. A good many Cuckoos remain to breed in Andalucia, and this year I heard them often up to the end of May.

April 30th. At the pine-woods of Puerto Real to-day I found two nests of the Raven (*Corvus corax*), built on pines close together. One was lined with sheeps' wool, ready for eggs; the other with rabbit-fur, and contained five fresh eggs. This date is fully seven weeks later than the time of laying in Northumberland. I shot to-day the first Russet-necked Nightjar (*Caprimulgus ruficollis*) seen this year. Melodious Willow-Warblers were observed in the sedges along the river-banks; and another conspicuous arrival was the handsome Rufous Warbler (*Aëdon galactodes*), frequenting abundantly the hedges of cactus and prickly pear, in which I found a clutch of four eggs on 14th May. Of our common birds I have noted to-day Greenfinches and Linnets (*Linota cannabina*). Walking back to Jerez, a very wet afternoon, 18 miles, a congregation of many thousands of Swallows were sitting on the dry mud along the edge of the marisma.

Early in May I returned to the Guadalquivir district, equipped for a fortnight's sojourn in the wilds of the Coto de

Doñana and the marisma. While crossing the river above San Lucar, an Osprey was observed, and numerous Black Kites were, as usual, busy fishing in the tideway. On the 4th, a nest of the Booted Eagle contained two eggs, nearly fresh. On the side of the nest, from which I killed the female Eagle, lay a large lizard and half a rabbit. A Kestrel's nest in a pine contained six fresh eggs partly covered with fish-scales. Stopping that night at La Marismilla, I found two nests of White Owl (*Strix flammea*) in the roof. There were six eggs and three young birds, all mixed; and I captured both the old Owls on the nest. Next morning, shortly after daybreak, in a rushy glade, I came suddenly on a herd of about twenty wild pig, mostly females with their young: probably the exigencies of the season accounted for their being abroad at a later hour than is their habit. Later in the day I almost trod upon the old boar, deeply slumbering in an isolated thicket; he was grizzly with age, his fore quarters looking almost white as he trotted across the sand.

May 5th. To-day, in a long ramble along the edge of the marisma, a great variety of wildfowl was observed. Buff-backed and Squacco Herons, Egrets, Spoonbills, and Avocets in considerable flocks among the rushes, where I obtained many beautiful specimens by stalking. Further out on the shallow water were still small parties of Ducks, probably on passage; but these were not accessible. Presently I made out with the glass a score or so of red Knots, busily feeding along the shore: while I was creeping down on them, a fine adult male Marsh-Harrier rose from some rushes close at hand. I knocked him down, and found he was lunching on one of the Knots. The latter I could not mark down; but I observed seven Greenshanks feeding a little further off, one of which fell to a long shot: an immature bird. Curiously, I could see no adults of this species, though early in March I had found the old birds numerous in the "salinas" near Tangiers, but no young ones. The adults appear almost white at a short distance.

Our course lay across a wide bight of the marisma, which there projects into the land. Crossing this, I fell in with several packs of Sand-Grouse (*Pterocles alchata*), which species arrives in Spain late in April; they are very wild birds, flying something like Teal and uttering a loud harsh croak. After much manœuvring on the flat marsh, I obtained several beautiful specimens of both sexes. No bird, I think, equals this species in the exquisite delicacy of the pencilling and the harmonious disposition of colours in its plumage. Their eye-circles and eyelids are of a beautiful ultramarine blue. Their summer plumage differs considerably from that of winter, as represented in "Bree," principally as follows:— In the male the throat is black, and a line of that colour passes through the eye to the ear. The head and neck are plain, *i. e.* unspotted, but the brownish-green back is covered with *large* yellow spots, some of which extend to the tertiaries. The female has the head spotted above the black line through the eye; below that the throat and cheeks are plain yellow. Her back plumage is so beautifully variegated as almost to defy description; briefly it is finely barred with yellow and black of various shades, but this is relieved by broad bars of a pale clear blue. Their name is hardly appropriate, for I never saw them on the sand, always on the mud, and when shot their feet and bills are generally covered with it. The larger species (*P. arenarius*) I did not meet with, though it is well known as "Corteza;" the present bird being called "Ganga," signifying a bargain, in reference to its edible qualities.

After heavy rains in April the mud and water in the marisma were unpleasantly deep for locomotion, and on the low islands many thousands of eggs had been destroyed by the rising of the water. A great variety of birds were now breeding, Stilts and Avocets being perhaps the most conspicuous: I found a few of their eggs to-day (May 5th), but a few days later they were in thousands. The Stilts make a tolerably solid nest of dead stalks, and lay four eggs, neatly arranged, points inwards*. The Avocet's eggs are larger and lighter in colour than those of the Stilts, and, except when among grass, they seldom have any nest at all, merely laying at random on the bare cracked mud, often 2 or 3 inches apart. Some of the Avocets' nests had four eggs; but as several of the others contained five, or even six, it was obvious that these were the produce of more than one bird. In the great majority of cases three was the number. In neither of these species is any concealment attempted, whereas the Redshank habitually chooses the centre of the thickest tuft of grass or bog-plant available. Peewits also breed very numerously on the islands of the marisma, but are much earlier: I found their eggs early in April, and on the 9th of May they were hatching, most nests having one or more young birds out, the other eggs chipping. Scattered about on the dry mud were numerous clutches of four small eggs, belonging to two other species, the Kentish Plover and the Lesser Ring-Dotterel; the latter were the less numerous of the two, and were just beginning to lay, choosing the gravelly ridges of the islands. The Kentish Plover is an earlier breeder, many of their eggs being hard-set May 5th. I had previously found a nest of this species as early as 14th April, containing three of the most strongly marked eggs I have ever seen. They make perhaps rather more attempt at a nest than the former species; but there is not much to choose between them, and I frequently noticed the eggs of both these and other species laid in a slight hollow scratched in the dried remains of cattle-droppings. On these islands were many nests of the Spanish Short-toed Lark (*Calendrella bætica*), artlessly built of grass, and placed in small holes, like a Dunlin's, sometimes among thistles, as often on bare ground without cover. They were only commencing to lay on May 9th, most nests then containing one egg.

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* Several young Stilts obtained in the middle of June were mottled brown above. Legs of medium length, much thicker than those of the adults, especially about the knee, and pale brownish or clay-colour.

May 9th. While blowing and numbering eggs on a small island which was literally covered with Avocets' nests, my cazador Felipe, whom I had sent to explore another small island close at hand, came up with five eggs, which he said he thought must be Gull's. I saw at a glance he was right; and jumping up espied, among the clamorous crowd of

Avocets, Marsh-Terns, Stilts, and other birds overhead, a single pair of strangers—small, very long-necked Gulls. These I promptly knocked down, and at once recognized them as *Larus gelastes*. Only a few days before I had received a letter from Mr. Howard Saunders, especially enjoining me to keep a strict look-out for "the beautiful pink-breasted, slender-billed Gull." I therefore at once instituted a careful search on all the islands in sight, never dreaming but that the five eggs and the two Gulls were related to each other. However, that afternoon I was greatly surprised to find another Gull's nest containing two very different eggs (white ground, spotted with black and brown, like those of *Sterna cantiaca*), from which I also shot a female *L. gelastes*. This time, however, there was no doubt; for the bird, while "in articulo mortis," actually laid a third egg in the water, a perfectly coloured and developed specimen exactly resembling the two in the nest. Then, to make assurance doubly sure, I found, on skinning the first pair, that the female contained another perfectly developed specimen of this very distinct egg. Of course this placed the identity of the eggs of *L. gelastes* beyond doubt; it was, however, equally certain that the first five eggs, which were dull greenish or stone-colour faintly spotted with brown, belonged to a different species. Accordingly I returned to the first-named islands, and at once perceived two or three pairs of small black-hooded Gulls; these had doubtless been overlooked in the morning, mixed up as they were among numbers of the Gull-billed Terns and other birds. They would not allow approach within shot, so I was obliged to risk a long chance with wire cartridge. The bird was feathered, but escaped at the moment. Two days afterwards, however, on a second visit I found it lying dead, and recognized it, by the black hood and strong bill, as *L. melanocephalus*, beyond a doubt the owner of one of the two nests.

These islands lay about six miles distant from the low shores of the marisma, and at that distance no land whatever was in sight. The "coup d'œil" therefrom presented an extraordinary scene of desolation: the only relief from the monotony of endless wastes of water were the birds; a shrieking, clamouring crowd hung overhead, while only a few yards off the surface was dotted with troops of Stilts, sedately stalking about knee-deep—in no other situation do their long legs enable them to feed. Further away large flights of smaller Waders flashed, now white, now dark, in the sun: most of these were Ring-Dotterels, Dunlins, and Curlew Sandpipers, the two latter in full breeding-plumage. A Marsh-Harrier, oologically inclined, was being bullied and chased by a score of Peewits, and now and then a little string of Ducks high overhead would still remind one of winter. Beyond these, the strange forms of hundreds of Flamingoes met one's eye in every direction—some in groups or in dense masses, others with rigidly outstretched neck and legs flying in short strings, or larger flights "glinting" in the sunlight like a pink cloud. Many pairs of old red birds were observed to be accompanied by a single white (immature) one. But the most extraordinary effect was produced by the more distant herds, the immense numbers of which formed an almost unbroken white horizon, a sort of thin white line separating sea and sky round a great part of the circle.

A incident occurred one day which is worth recording as illustrative of the singular desolation of the scene. Far off in the marisma I noticed two large animals evidently watching me. I saw they were not deer, which often come out into the marisma, but never so far as to where I then was: so, putting in ball-cartridge, I rode towards them. At about 400 to 500 yards they suddenly wheeled round and trotted off with a shambling gait. There was no mistaking them then, as soon as their broadsides were exposed to view; they were two camels, one much larger than the other!

I had heard on my first visit to this wilderness, eleven years before, of the existence of camels therein, but was as incredulous as, no doubt, my readers will now be. However, I may add that some 40 years ago, or more, the experiment of using camels was tried in Andalucia, as they are so generally employed on the opposite shores of Morocco. The scheme failed, and the camels were set free in the marisma;

and if they do not breed in a feral state, it is difficult to account for one of those above mentioned being at least a third larger than the other*.

To return to the Flamingoes. On examining narrowly the different herds, there was an obvious dissimilarity in the appearance of certain groups: one or two in particular seemed so much denser than the others; the narrow white line appeared at least three times as thick, and in the centre looked as if the birds were literally piled upon each other. Felipe suggested that these birds must be at their "pajarera," or breeding-place; and after a long ride through rather deep water, we found that this was so. On our approach, the cause of the peculiar appearance of the herd from a distance became clearly discernible. Many of the birds were sitting down on a low mud island; some were standing on it, and others, again, were in the water. Thus the different elevations of their bodies formed what had appeared a triple or quadruple line.

On reaching the spot, we found a perfect mass of nests; the low mud plateau was crowded with them as thickly as the space permitted. These nests had little or no height: some were raised 2 or 3 inches, a few might be 5 or 6 inches; but the majority were merely circular bulwarks of mud, with the impression of the bird's legs distinctly marked on it. The general aspect of the plateau was not unlike a large table covered with plates. In the centre was a deep hole full of muddy water, which, from the gouged appearance of its sides, appeared to be used as a reservoir for nest-making materials.

Scattered all round this main colony were numerous single nests rising out of the water, and evidently built up from the bottom. Here and there two or three or more of these were joined together—"semi-detached," so to speak; these sepa-

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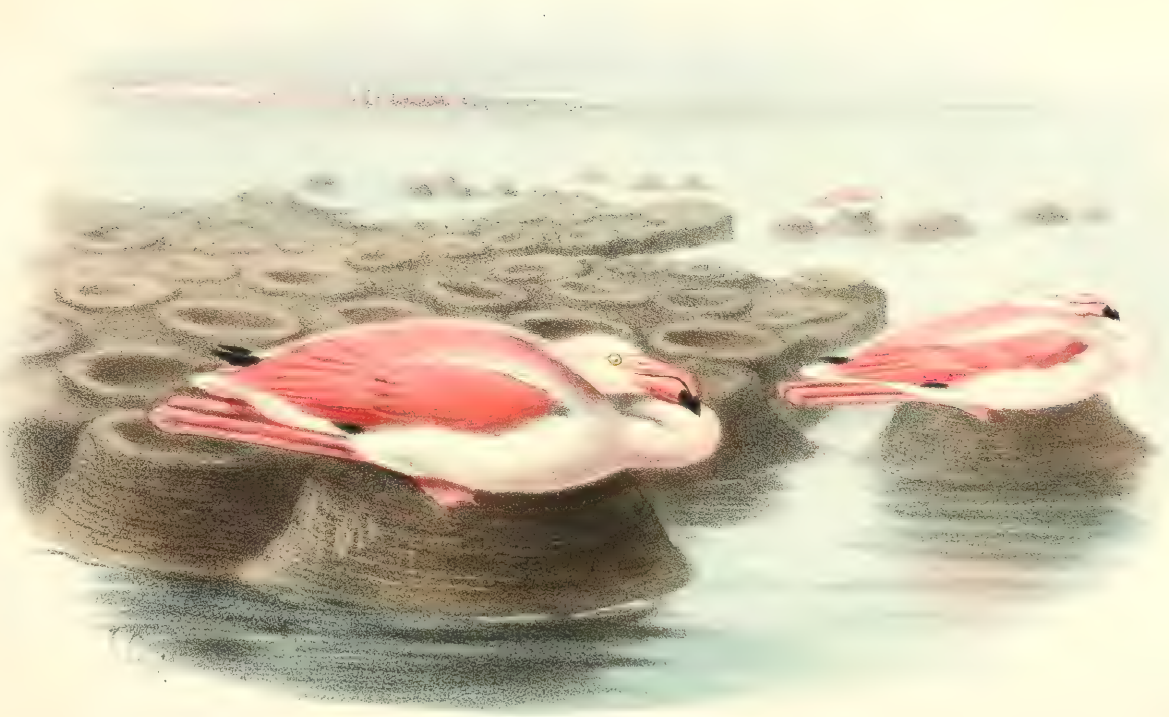
* [I saw a small herd of these feral camels in the Coto de Doñana on he 3rd of May, 1868; but finding that my statement as to the breeding of the Crane in that neighbourhood was received with much incredulity, I kept the apparition of the camels to myself. I possessed the eggs of the Crane to convince the sceptics, but I could not have produced a camel!—H. S.]



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FLAMINGOES ON THE NEST.

rate nests rose some 6 or 8 inches above the water-level, and were about 15 inches across. The water was about 12 or 15 inches deep. None of these nests as yet contained eggs; and though I returned to the "pajarera" on the latest day I was in its neighbourhood (May 11th), they still remained empty. On both occasions many hundreds of Flamingoes were sitting on the nests, and on the 11th we had a good view of them at close quarters. Linked arm and arm with Felipe, and crouching low on the water, to look as little human as possible, we approached within some 70 yards before their sentries showed signs of alarm, and at that distance with the glass observed the sitting birds as distinctly as one need wish. Their long red legs doubled under their bodies, the knees projecting as far as or beyond the tail, and their graceful necks neatly curled away among their back-feathers, like a sitting Swan, with their heads resting on their breasts—all these points were unmistakable. (See Plate IV.) Indeed it is hardly necessary to point out that in the great majority of cases (the nests being hardly raised above the level of the flat mud) no other position was possible.

Still none of the crowded nests contained a single egg! How strange it is that the Flamingo, a bird which never seems happy unless up to his knees in water, should so long delay the period of incubation; for before eggs could be hatched in these nests and young reared the water would have entirely disappeared, and the Flamingoes would be left stranded in the midst of a scorching plain of sun-baked mud. Being unable to return to the marisma, I sent Felipe back there on 26th May, when he obtained the eggs; but as yet I have heard no particulars, my faithful cazador being unable to write. In 1872 I obtained eggs taken on the 24th of May. One of my specimens is extremely rugose.

On the 11th May the Pratincoles were just beginning to lay (one or two eggs in each nest); but subsequently I got them in basketfuls. Some of their eggs when taken have a beautiful purplish gloss; three is their complement, and they make hardly any nest.

Later, again, are the Terns. The Whiskered and Black species breed in colonies, building their nests on the floating weeds of the lagoons in the Coto de Doñana; they all lay three eggs. Those of the Whiskered Tern are mostly green with small black spots; a few, however, are olive-brown. The eggs of the Black Tern are of a rich brown, heavily blotched with black. The large Gull-billed Tern breeds out on the islands of the marisma: I obtained their eggs on my first visit on 23rd May.

Early in May I had found several nests of the Montagu's Harrier, but no eggs till the 10th. These birds breed in the thickest "manchas," or jungle, which are often wholly inpenetrable on account of the long and thorny "salza," a vicious sort of briar which entwines itself round the scrub, and forms a matted lacerating jungle often 15 or 20 feet high. Many of these "manchas" are islanded between ridges of blown sand, and are the stronghold of the Spanish lynx (*Felis pardina*), which are tolerably numerous and work havoc among Partridge and rabbits. Some of these Harrier's nests were on the ground, mere outlines of half-a-dozen twigs; others were placed 3 or 4 feet high, especially where there was water, and were loosely built of dead roots. In the water below lay many bones of rabbits. They also nest in the standing corn. The manner in which Felipe could call up the Harriers within shot by imitating the squeal of a wounded rabbit was surprising. Many of the Spanish "guardas" are intelligently observant of the *feræ naturæ* among which they live, and in field-craft they are far in advance of their British representatives.

During May I rode several times to the large Lagunas de Santa Olaya, where numerous wildfowl were breeding. Besides Mallards, Gadwalls, and Ferruginous Ducks, already described, were numerous Pintails, Teal, and some small grey ducks, I took to be *Anas marmorata*. I think some of the Pintails must remain to breed, as on May 8th I saw a "bunch" of a dozen or so at Santa Olaya, *all drakes*, their snow-white throats glistening in the sun. Near them a pair of Shoveller drakes were swimming. Next, the binocular rested on six of the most extraordinary-looking wildfowl I ever met with; gambolling and splashing about on the water, chasing each other, now above now below its surface, like a school of porpoises, they appeared half birds, half water-turtles, with which the lagoon abounds. Presently they entered a small reed-margined bay, swimming very deep, only their turtle-shaped backs and heavy heads in sight. I crept down on them, and as they sat, splashing and preening themselves in the shallow water, stopped three—two dead, the third escaping, winged. They proved to be a duck and drake of *Erismatura mersa*, heavily-built diving-ducks, round in the back, broad and flat in the chest, with small wings like a Grebe, and long stiff tails like a Cormorant; the latter, being carried under water as a rudder, is not visible when the bird is swimming. The beak of the drake was much enlarged above, and of a light mazarine-blue colour. Their whole plumage (except the white face) was dark ferruginous, and not (as represented in Bree) white below. I found they were known to the guardas as "Patos porrones," and subsequently found several pairs at the Laguna de Medina, near Jerez, where, on 23rd May, they were evidently breeding. At the same place were great numbers of the Great Crested Grebe (*Podiceps cristatus*), quaint-looking birds in their full summer dress. The nests of the Little Grebe were floating in every rushy pool.

As already mentioned, the Heron-tribe are numerously represented in Andalucia, both specifically and individually. Except *Ardea cinerea* and *A. purpurea* the whole family are late breeders. About the middle of May the Buff-backed Herons were often seen flying about the plains in packs of a score to fifty or more. The pretty little Squaccoes had then shifted their quarters to the reedy edges of the lagoons; and several nests appeared nearly ready for eggs in the "juncales," or reed-beds; but none of the genus appear to lay before June. Besides the species of Ardeidæ already mentioned in this paper, the Night-Heron and the Bitterns, both Common and Little, are also numerous in Andalucia. Nevertheless, owing to their retiring and nocturnal habits, these species are seldom seen, being difficult to raise without a dog. The same remark applies to the Rails, of which *Rallus aquaticus* and *Porzana maruetta* appear about equally numerous in the marshes. The Common Bittern, which is almost invariably "pointed" to by native dogs, falls a frequent victim to the Snipe-shooter in winter, lying extremely close in the rankest flags or reeds, in retired parts of the marshes. Its name of "Garza-mochuelo" (*i. e.* Owl-Heron), common to both Spain and Portugal, is singularly appropriate. I did not find its eggs, but have those of the Little Bittern.

As the long summer day draws to its close, the infinite variety of nocturnal sounds which during the short twilight suddenly awake into being strike strangely on a northern ear. Of crepuscular birds the first to commence the concert is the Russet-necked Nightjar (*Caprimulgus ruficollis*), which abounds all over the scrub. A few minutes later, from the cork-trees, resounds the note of the Little Owl, then the sharp ringing cry of the Scops Owl; while far and near, among the grass, the loud rattle of the crickets starts like an alarum; and from every pool the united croaks of literally millions of frogs form, as it were, a background of sound resembling the distant roar of a mighty city.

The Little Owls (*Athene noctua*) just mentioned breed in holes in the cork-trees, and early in May I found several of their nests with four and five eggs. In the same situations a Great Tit, with ten eggs, many Jackdaws, and other common species. On May 12th a Mallard's nest contained nine eggs, just chipping.

At Jerez, in the middle of May, I found several nests of the Orphean Warbler in bushes in the olive-woods, also one which I believe to be that of *Sylvia melanocephala*. The Woodchat's nests, many of which appeared ready for eggs on April 30th, contained none till May 14th. None of their eggs had any rufous tinge. The 14th May produced many nests of the Calandra, Crested, and Short-toed Larks, also of the Common Bunting, each of these with five eggs. On the 16th were added those of the Common Whitethroat, Rufous Warbler, and Lesser Kestrel. Bee-eaters were now laying in deep holes in the river-banks, breeding in colonies like

Sand-Martins. During April and May these birds frequented the plantations in the garden at Jerez in large flocks, and we noticed that their appearance among the trees was generally the precursor of heavy rains. I also obtained a nest of the Yellow Wagtail with four eggs.

During May Andalucia swarms with locusts, and over the fields of "garbanzos" or chick-pea, which they frequent, dozens of Black Kites are always hovering, while others are dotted about on the ground devouring these destructive insects.

In 1872 a considerable passage of Waders occurred on May 8th. The banks of the Guadalete river near Jerez swarmed with bird-life. A large "mixed bag" included Whimbrels, Grey Plovers, Curlew Sandpipers, Ring-Dotterels, and Sand-Grouse. Many of the Grey Plovers were superb specimens, in their beautiful black-and-white plumage, and the Curlew Sandpipers were in full rufous summer dress. Unfortunately the attractions of the Great Bustard, several of which were also in sight, proved irresistible; but I had the satisfaction of riding home that evening with my first Bustard slung to the "alforjas." I also observed that day a single Crane.

A visit to the sierra in the middle of May was not very productive. The Guadalete was in heavy flood: two men, together with their nine mules, were drowned in attempting the passage just as I rode up to the Barca Florida. Consequently, having to make a long detour, it was impossible to reach the sierra before nightfall. While improvising a camp among the palmetto-scrub at dark, an alarming sound attracted my attention. It resembled the distant bellowing of an enraged bull—a formidable beast in this land of the toreador; but Felipe assured me it only arose from the Andalusian Quail (*Turnix sylvatica*), a tiny game-bird which frequents the palmetto. In reference to its extraordinary lung-power, this little bird is called in Spanish "Torillo" = little bull. I only met with the species on one other occasion; but have two eggs which were laid in confinement at Jerez.

In the cliffs of the Puerta de Pálomas, in the Sierra de Alcalá de los Gazules, the Griffon Vultures had now (May 16) half-grown young, partly feathered and partly in white down. Of sixteen nests reached, only two contained more than one young bird. The Vultures, on returning to their nests, utter a peculiar growl, often the first sound heard at daybreak on awakening from one's roofless bedroom among the boulders. The young Griffons were never seen on the wing till the month of July, having spent about three months in the nests; they were then (July 10th) of a clear bright cinnamon-colour, and measured between 8 and 9 feet in expanse of wing.

In the plains the Griffon Vultures hunt in strata at varying altitudes, the highest tiers visible being mere points in the azure height. It seems obvious that only the lowest stratum can be on active duty, the upper parties merely standing by to profit by the labours of all the working detachments which may be in sight below; for at their enormous elevation it is impossible that even a Vulture could detect so small an object as, say, a dead goat on the earth. We estimated the altitude of the lowest stratum at 800 to 1000 yards.

In the roofs of some large caverns a colony of Alpine Choughs were breeding; their nests were quite inaccessible; but at a lower point were several of *Cotyle rupestris*; their eggs were flecked slightly with grey. In the attempt to reach the Chough's nests, I came suddenly on a pair of Eagle-Owls; but being in a very awkward position on the crag-face, I was unable to spare a hand to shoot them. No better luck attended a search for the nest of the Blue Thrush; but a few days afterwards a clutch of its five beautiful greenish-blue eggs was taken. The male has a pretty habit of towering up in the air, singing merrily, then dropping back among the crags like a stone.

Round the lofty conical peak called the "Peñon de Hibe," which towers over the surrounding sierras, something like a gigantic facsimile of Arthur's Seat over the Salisbury crags, I had the pleasure of observing for some time a magnificent *Gypaetus barbatus*, the only specimen of this fine bird that came under my observation.

From the rugged stony slopes of the sierras, the energetic mountaineers have reclaimed many patches of corn-land. About these *Emberiza cia* and *E. miliaria* were abundant. I failed to find the nest either of the first-named bird or of *E. cirlus,* which were also numerous in the lower valleys and outskirts of the sierra. A high crag on the ridge of the sierra was occupied by a colony of Alpine Swifts; their nests were in crevices of the rock, and their flight strikingly dashing and powerful.

My two animals having fallen lame from loss of shoes, caused me no small difficulty in extricating myself from the heart of these rugged and pathless sierras. My non-arrival in Jerez also caused extreme anxiety among my kind friends there, who unfortunately connected my disappearance with the accident (above mentioned) on the Guadalete. Incidentally I may remark that travelling in the wilder regions of Andalucia is inseparably beset with difficulties at every point; but these I have purposely abstained from enlarging upon. Eventually, after dragging the lame beasts some twenty miles, we succeeded in getting clear. Passing the outlying spurs of the sierra, a pair of large dark Eagles were noticed hunting a scrub-covered ridge. The larger one presently swept down upon an unlucky rabbit, and forthwith commenced to devour it. The male Eagle thereupon perched on a stump 100 yards or so further off. They were favourably placed for a stalk, so riding round in a wide circuit, I crept down within 40 yards of the larger Eagle, and killed her as she rose. This bird proved to be *Aquila bonellii,* a fine adult female. On the 19th May, riding homewards over the low rolling hills adjacent to the sierra, a great number of Little Bustards were descried: they were extremely wild and watchful; but after great difficulty I managed to shoot a beautiful male from horseback. I was at once struck with the extraordinary appearance of the throat and neck, resembling a black ruff. At first I thought this might arise from an effusion of blood, as one often sees, in a less degree, in a shot Grouse; but a careful examination of this, and of another male I obtained afterwards, showed that it arose from the inflation of the gular pouch, which appears to be chronically distended during the breeding-season—a fact I have not seen recorded. The black feathers on the lower part of the neck are long and hackle-like.

June in Spain is a month of intense heat. According to the Spanish proverb, "Nothing but a dog or an Englishman" ventures out of doors; nor, according to my experience, is there much inducement to do so. The teeming variety of bird-life which characterizes April and May is now conspicuously absent. Migration is suspended, and there is no movement of passage-birds. There is no longer the accustomed quantity of large Hawks hunting the "campina;" and even those birds which remain seem to keep out of sight, sheltering from the blazing heat. This is the time to get the eggs of the Herons, for any one who has sufficient pluck to ride, say, 50 or 60 miles through the scorching suffocating marisma, where the dothering heat reflected from the cracked mud is simply intolerable.

Perhaps the most interesting birds at this season are the newly-fledged young of the Raptores. The young Imperial Eagles are of a beautiful uniform rich tawny colour, and at midday frequent the trees where they were hatched. The plumage of these birds rapidly fades with age and exposure to the sun, and appears by the following spring almost white at a distance. The next stage is the acquisition of the black plumage, I think, during their second autumn. These black feathers coming gradually and irregularly among the light ones, give the bird at that period a peculiar spotted or piebold appearance. I also obtained young Kites (*Milvus ictinus*) in the same way—very handsome birds, much ruddier than the old ones in April. The young of *M. migrans,* on the contrary, are less pleasing than their parents, being, in fact, a pale, rather "washed out" reproduction of them. Towards the end of the month the young Montagu's Harriers are on the wing; they have dark brown backs, each feather edged with chestnut, a white nape, and rich orange-tawny breasts. An adult male, shot on the 10th, was much blacker than those killed in April, caused by the wearing of the edges of the upper coverts. Many of the young of the Marsh-Harrier are uniformly very dark, almost black, with rich orange crowns, strikingly handsome birds. Some have also patches of the latter colour on the scapulars, others on the breast; but they vary greatly, no two are alike. Indeed, I hardly understand this species. One imagines that the dark specimens are all young birds, that the old females are lighter brown with yellow heads, and that the very old males acquire half-blue wings and tail. I shot one of these latter with the head pure white, each feather streaked centrally with black. But can any one account for an individual (otherwise uniformly black) having a perfectly developed blue tail and secondaries? During June I was surprised to find the Green Sandpiper tolerably numerous in the Coto de Doñana; it was a very solitary species, a single bird frequenting each water-hole far out among the scrub. I at first imagined that the females must be sitting; but all efforts to find a nest were of course futile. Of the Wood-Sandpiper a single example occurred in the middle of May.

June 15th. A solitary Black Vulture (*Vultur cinereus*) observed sitting on a dead tree in the Coto de Doñana. I also saw this species in the sierra, where they breed sporadically, a single pair sometimes appearing to ally themselves to a colony of Griffons. The Sardinian Starling (*Sturnus unicolor*) was abundant, in flocks, in June.

The following remarks refer to a few other species observed, but which have not been mentioned in the narrative:—

Elanus melanopterus. Observed what I believe to have been a pair of this species above San Lucar in April. The male fell to a long shot, but subsequently rose again and escaped.

Accipiter nisus. Observed a few times, and one or two shot: not common. Of the Goshawk and Honey-Buzzard, I saw nothing.

Asio otus and *A. brachyotus.* Both species observed in winter.

Alcedo ispida. More numerous in Portugal than in Spain.

Gallinula chloropus. Abundant and resident. Its Portuguese name "Rabo-coelho," *i. e.* rabbit-tail, appears a singularly happy one.

Porphyrio cæruleus was frequently described to me; but I did not myself meet with it. Felipe found a nest at the end of May.

Ciconia nigra. Scarce. A pair shot, right and left, near Jerez, in March.

Puffinus —— (? sp.) and *Stercorarius* —— (? sp.). Observed abundantly in the Straits of Gibraltar in March.

Sula bassana. Also observed in the Straits and Bay of Trafalgar. On March 29th several were observed in the middle of the Bay of Biscay, flying northwards.

Thalassidroma pelagica. Observed abundantly on the coast in autumn, but none in spring.

The following are a few of the species met with in winter, but which returned north in spring:—

Mergus serrator. Rather numerous.

Colymbus septentrionalis. Less common.

Charadrius pluvialis. Abundant.

Gallinago cœlestis, G. gallinula, Scolopax rusticula. Common.

Snipe are very numerous in favourable seasons. From 50 to as many as 100 couple are sometimes bagged in a day by two or three guns. Out of 150 shot by myself at Ovar, in Portugal, the proportion of Jacks was 33 to 117 full Snipe. The last shot was on April 8th. Of Woodcock the heaviest bag I heard of in Andalucia was seventeen couple (two guns); but this is exceptional.

Crex pratensis. Scarce.

Turdus musicus, Sturnus vulgaris, Anthus pratensis. Common.

Alauda arvensis. Common.

Erithacus rubecula. Scarce.

Motacilla alba. Very abundant, especially in September.

M. boarula. Less common.

Corvus corone. Scarce.

C. frugilegus. Occasional flocks.

Besides these, many other species are found, notably most of our common British Laridæ and many of the Anatidæ Wigeon, in particular, were very numerous from October to March, and not being much molested at "flight" time, came in from the sea much earlier and more regularly than is their wont at home, where every *Zostera*-covered estuary is, at night, "horrid" with guns.

During the autumnal passage the following species were obtained on the coast of Portugal:—

Numenius arquatus and *N. phæopus*. The former remained throughout the winter; but the Whimbrels went on further south.

Limosa rufa, Totanus canescens, T. hypoleucus, and *Tringa canutus*. All abundant on passage; but none obtained after September. All immature.

Ægialitis hiaticula, Tringa maritima, T. cinclus, and *Strepsilas interpres*. These also arrived in September; but many remained throughout the winter.

May 31st. At Tangier, M. Olcese showed me a clutch of five eggs unknown to him, and which were certainly those of the Missel-Thrush. I also obtained from him a beautiful adult Lanner Falcon—the only dollar, by the way, I invested in collector's skins.

This concludes my ornithological record. It is, I fear, very imperfect and very unskillfully put together; but I have a certain confidence in my facts, for I spared no pains or trouble to ascertain what I have written. Spending weeks at a time in the wildernesses and sierras of Spain, camping out in the open wherever night overtook me, and, my own affinities being decidedly "raptorial," I have myself shot most of the birds herein enumerated, from the Tomtit to the Golden Eagle.

In conclusion I wish to acknowledge my obligation to the owners of the Coto de Doñana for so kindly placing their noble domain and army of keepers at my disposal; and last, not least, to express my deep and lasting gratitude to those kind friends, both in Spain and Portugal, at whose hands I have been the recipient of such untiring assistance and abounding hospitality.

X.—*Notes on Woodpeckers.*—No. V. *On a new Japanese Woodpecker.* By EDWARD HARGITT, F.Z.S.

WHEN I wrote my paper on the genus *Iyngipicus* (Ibis, 1882, p. 19) I was acquainted with only one species of the genus from Japan. My friend Mr. Seebohm has, however, recently shown me some specimens from the island of Kiusiu, or Kimo, which differ materially from the bird described in the above-mentioned paper as *I. kizuki.* Up to the date of my paper I had only examined birds from the northern island of Japan, and I was therefore somewhat surprised to find that the species from Kiusiu is really the true *I. kizuki* (Temm.), and that the more northern bird is apparently without a name. Naturalists are so much indebted to Mr. Seebohm for the excellent labour he has bestowed upon the ornithology of Japan, that I trust my appellation for this unnamed bird will meet with their approval when I describe it as

IYNGIPICUS SEEBOHMI, sp. n.

Similis *I. kizuki,* sed major et subtus conspicue albescentior, et præcipue pilei colore cinereo, nec brunneo rufescente lavato distinguendus. Long. tot. 5·3, culm. 0·65, alæ 3·3, caudæ 1·95, tarsi 0·62.

Hab. in insulis Japonicis "Niphon" et "Yezo" dictis. Typ. in Mus. meo.

Seebohm's Pigmy Woodpecker is a larger and whiter form of *I. kizuki.* The underparts are conspicuously whiter, and have none of the fulvescent tinge on the abdomen which is to be seen in the last-named bird. The white barring on the back is also more strongly pronounced; but its chief claim to distinction lies in the colour of the crown, which is of a clear pale grey, instead of the brown head, with a rufous tinge, which is seen in *I. kizuki.* The last-named species bears the same relation to *I. seebohmi* that *I. scintilliceps* of China bears to *I. doerriesi* of Eastern Siberia.

The synonymy of the two forms will be as follows:—

1. IYNGIPICUS KIZUKI.

Picus kizuki, Temm. Pl. Col. iv., text to livr. 99 (1835);

Bp. Consp. i. p. 135 (1850); Reichenb. Handb. Scans. Picinæ, p. 370, Taf. dcxxxvi. figs. 4236–4238 (1854); Gray, List Picid. Brit. Mus. p. 41 (1868); id. Hand-l. B. ii. p. 184. no. 8585 (1870).

Picus kisuki, Temm. Tabl. Méth. p. 64 (1836); id. & Schleg. Faun. Japon. p. 74, Taf. xxxvii. (1850); Malh. Monogr. Picid. i. 154, pl. xxxvi. figs. 1, 2 (1861); Sundev. Consp. Av. Picin. p. 28 (1866).

Picus zizuki, Gray, Gen. B. ii. p. 435 (1845); Jerd. B. Ind. i. p. 279 (1862).

Yungipicus kisuki, Bp. Consp. Volucr. Zygod. p. 8 (1854).

Picus kogera, Malh. Monogr. Picid. i. p. 154 (1861, MSS. ex spec. olim in Mus. Zool. Soc.).

Bæopipo kisuki, Cab. & Heine, Mus. Hein. Th. iv. p. 60 (1863).

2. IYNGIPICUS SEEBOHMI.

Picus kizuki (non Temm.), Swinh. Ibis, 1875, p. 451; Blakiston & Pryer, op. cit. 1878, p. 229; Seebohm, op. cit. 1879, p. 29.

Picus kisuki, Blakist. Ibis, 1862, p. 325.

Iyngipicus kizuki, Hargitt, Ibis, 1882, p. 36.

XI.—*Notices of recent Ornithological Publications.*

1. *Booth's Rough Notes on British Birds.*

[Rough Notes on the Birds observed during Twenty Years' Shooting and Collecting in the British Islands. By E. T. Booth. With Plates from drawings by E. Neale, taken from specimens in the Author's possession. Part IV. Folio. London: 1883. Published by R. H. Porter, 6 Tenterden Street, W.]

In Part iv. of this work the illustrations by Mr. E. Neale are of the Raven, Crossbill, Grey-headed and Yellow Wagtails, the Scandinavian form of the Rock-Pipit, Black Redstart, Wheatear, and Willow-Wren, the letterpress treating of some of the British Wagtails, Pipits, Redstarts, Chats, and a few of the Warblers. Mr. Booth's observations, based entirely upon his personal experience, cannot fail to be valuable; and his remarks upon the geographical distribution of many of the species, as regards the British Islands, are of considerable interest. The illustration of the first plumage of *Motacilla raii* will probably challenge criticism; but we have seen specimens nearly, if not quite, as distinctly spotted with blackish brown on the throat and upper part of the breast. As regards the vinous-breasted birds which Mr. Booth considers to be the Scandinavian form of *Anthus obscurus*, they appear to have changed their line of flight during the past ten years, none being now obtained near Brighton, where they were formerly plentiful on migration. It is somewhat remarkable that a field-naturalist of Mr. Booth's experience should not have been able to trace the Grasshopper Warbler beyond Norfolk: he can hardly have been in Northumberland in summer, for scarcely in any other county in England is the bird so common, especially on the Cheviots.

2. *British Association's Report on Migration in* 1882.

[Report on the Migration of Birds in the Spring and Autumn of 1882. By Mr. John A. Harvie-Brown, Mr. John Cordeaux, Mr. R. M. Barrington, and Mr. A. G. More. 8vo. London: 1883.]

This fourth Report is satisfactory, inasmuch as it shows that the keepers of lighthouses and lightships continue to take an interest in the scheme of observations, and some of their contributions are of considerable value. A feature of the year was the enormous migration of Goldcrests (*Regulus cristatus*), extending from the Færoes, to the north, along the entire east coast of Scotland and England (inclusive of Heligoland) down to Guernsey; and scarcely less remarkable was the great flight of the Jay (*Garrulus glandarius*). Among the rare occurrences are those of *Oriolus galbula* so far north as Lerwick in Shetland; a Pectoral Sandpiper (*Tringa maculata*) on Loch Lomond; an Eastern Pied Chat (*Saxicola morio*) on Heligoland, where, by the way, a Little Bustard (*Otis tetrax*) was also obtained for the first time; an Alpine Swift (*Cypselus melba*) in Northumberland; and a Red-breasted Snipe (*Macrorhamphus griseus*) in Lincolnshire.

3. '*Bulletin of the Nuttall Ornithological Club.*'

[Bulletin of the Nuttall Ornithological Club: a Quarterly Journal of Ornithology. Vol. viii., October 1883. No. 4.]

As will be seen by the report of the proceedings of the foundation-meeting of the American Ornithologists' Union, which we have given above in full, the 'Bulletin of the Nuttall Ornithological Club' has now become the Journal of the A. O. U., and will reappear in this form in January next under the editorship of Mr. J. A. Allen. The number now before us therefore concludes the present series of the 'Bulletin.' It contains several very interesting articles.

Messrs. Allen and Brewster finish their list of the birds observed in the vicinity of Colorado Springs in the spring of 1882, and notice the occurrence of specimens of *Junco aikeni*, *Cypselus saxatilis*, and other scarce species. Mr. W. B. Barron continues his acceptable notes on the birds of the Lower Uruguay, and records valuable particulars of the nesting-habits of many little-known birds, amongst which are twelve of the Synallaxine group. *Phacellodomus sibilatrix*, Doering, is said to be abundant among the open woods along the Uruguay. Dr. C. Hart Merriam records the occurrence of *Vireo flavo-viridis* in the province of Quebec. Mr. Brewster describes an "apparently new Gull," allied to *Larus glaucescens*, as *Larus kumlieni*. The new species is based on three specimens obtained in Cumberland Sound, Bay of Fundy, and near Grand Menan. Finally Dr. Merriam records the breeding of the Harlequin Duck (*Histrionicus minutus*) in Newfoundland.

4. *D'Aubusson's 'Birds of France.'*

[Les oiseaux de la France, par Louis Magaud D'Aubusson. Première monographie, Corvidés. Histoire Naturelle générale et particulière des Passereaux Déodactyles Cultrirostres observées en France. Figures coloriées de toutes les espèces, de leurs variétés et de leurs œufs. Planches ostéologiques lithographiées. Paris: Imprimerie de A. Quantin, 7 Rue Saint-Benoit. 1883. Quarto, 168 pp., 20 plates.]

It is pleasant to welcome a new labourer in the field of ornithological literature, and M. D'Aubusson's coloured figures are certainly superior to the ordinary product of the French lithographer. But we must say we are disappointed with the letterpress, which seems to contain little original, and is hardly likely to supersede existing authorities on the birds of France.

5. *Gould's 'Birds of Asia.'*

[The Birds of Asia. By J. Gould, F.R.S. Dedicated to the Honourable East India Company. Part XXXV. Folio. London: 1883.]

The thirty-fifth part of the 'Birds of Asia,' which concludes the work, contains figures of the following species:—

Argusianus argus.
Leiothrix laurinæ.
Indicator xanthonotus.
Iyngipicus gymnophthalmus.
Iyngipicus peninsularis.
Iyngipicus nanus.
Uragus sibiricus.

The number also contains the title-pages and lists of plates for the seven volumes in which it is proposed that the work shall be bound, and the preface and introduction by Mr. Sharpe. The latter contains so much matter of general interest concerning the recent progress of our knowledge of Asiatic ornithology that, with the author's consent, we have reprinted it in this Journal*.

6. *Hartlaub on the Genus* Hyliota.

[Die Gattung *Hyliota*, Sw., monographische Skizze von Dr. G. Hartlaub. (Separatabdr. aus Cab. J. f. Orn. Jahrg. 1883.) Juli-Heft. Naumburg am S., 1883.]

Dr. Hartlaub's excellent monographic sketch of the African Muscicapine genus *Hyliota* is, we need hardly say, as complete as such an essay can be made with the present state of our knowledge. Four species are recognized and carefully described, of which *Hyliota barbozæ,* from Benguela, is now first described.

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* See above, p. 49.

7. *Nelson on the Birds of Bering Sea.*

[Cruise of the Revenue-Steamer 'Corwin' in Alaska and the N.W. Arctic Ocean in 1881. Washington: 1883. 1 vol. 4to.—Birds of Bering Sea and the Arctic Ocean. By E. W. Nelson. Pp. 55–118.]

On the 21st June, 1881, the 'Corwin' left St. Michaels, Alaska, in search of traces of the ill-fated 'Jeannette' and two missing whaling-ships. Fortunately for ornithology, Mr. Nelson, who had long been at St. Michaels, was taken on board for this cruise, in the course of which all the islands in Bering's Straits, Herald and Wrangel Islands, the Siberian shore from the Straits to the North Cape, and the entire Alaskan coast-line from the Straits to Point Barrow were visited. As supplementing the observations of Dall and Bannister on the American, and Nordenskiöld on the Siberian avifauna, Mr. Nelson's observations are of the highest interest, and he has also availed himself of the notes of Mr. Newcomb, the naturalist to the 'Jeannette,' Dr. T. H. Bean, and Mr. Elliot.

The Emperor Goose (*Bernicla canagica*), which appears to have the most restricted range of any American Goose, was found in abundance on the south-western portion of St. Lawrence Island, and again on the Bering sea-coast of Alaska from Cape Vancouver to the mouth of the Yukon, north of which it becomes rare. On the opposite coast of Siberia it is also met with where the shore is low and bordered by lagoons; and there also Steller's Eider and the King Eider occur in great abundance. The islands of Bering's Straits and the Diomede Islands are all resorted to by the Crested, Parrot-billed, and Least Auks; and some small rocky islets in the Aleutian group are the breeding-places of the beautiful grey Fork-tailed Petrel (*Oceanodroma furcata*)—not to be confounded with Leach's Petrel, which is often called by the above trivial name. Mr. Nelson's observations on the once rare Ross's Gull (*Rhodostethia rosea*) are of much interest, and encourage us to hope that in a few years, at most, ornithologists will be acquainted with it eggs and nestlings. We had been aware since May 1882 that Mr. Newcomb, of the 'Jeannette,' had obtained eight specimens, but we did not know until recently that, when it was a question of saving their bare lives, and the necessaries of existence which each one of the shipwrecked crew could carry had to be weighed literally by the ounce, Mr. Newcomb gallantly stuck to three of these birds, and brought them in safety across Asia and Europe to the Smithsonian Institution. He probably remembered that the Austro-Hungarian Expedition obtained one at Franz-Josef Land, but abandoned it with the 'Tegetthoff,' and determined that he should not be reproached with the same want of enthusiasm. In the records of collecting we can call to mind no similar instance of bull-dog tenacity. Mr. Nelson obtained another Ross's Gull in the mottled plumage of the first year in October, which made four altogether in the Smithsonian at the time of writing his contribution; and we understand that this summer some further examples have been obtained near Point Barrow. The above are only some of the salient features of this valuable memoir, which will amply repay perusal.

8. *Oates's 'Birds of British Burmah.'*

[A Handbook to the Birds of British Burmah, including those found in the adjoining State of Karennee. By Eugene W. Oates, Executive Engineer, Public Works Department of India (British Burmah). London: R. H. Porter and Dulau & Co. Vol. II. June 1883. (Completing the Work.)]

Of the excellent style of Mr. Oates's work, and of the admirable way in which he has carried out his plan of a handbook of the birds of British Burmah, we have already spoken in our notice of his first volume (Ibis, 1883, p. 380). Of the second volume, which treats of all the remaining orders after the Passeres, and completes the work, we need only say that it has been prepared in the same manner and merits equal praise. Few persons who come home from India on two years' leave would like to undertake such a task or, what is still more important, would bring it to such a successful conclusion.

The total number of species recognized by Mr. Oates as at present known to belong to the avifauna of British Burmah is 780, of which no less than 401 are Passeres, indicating the great development attained by this multitudinous order in the rich regions of the eastern tropics. But large as is the list, our author assures us that it cannot be considered by any means complete. "Much remains to reward the explorer on the higher mountains both of Arakan and Tenasserim."

Mr. Oates seems to have made (p. 6) a new generic name, "*Rhaphidura*," for *Acanthylis leucopygialis* and *A. sylvatica*. A coloured map attached to the introduction will greatly add to the comfort of those using the 'Handbook to the Birds of British Burmah,' which we can conscientiously recommend to ornithologists as a most useful and well-executed work.

9. *Oustalet on Birds from Somali-land.*

[Faune et Flore des Pays Çomalis (Afrique Orientale), par Georges Révoil. 8vo. Paris: 1882. Note sur les oiseaux recueillis dans le pays des Çomalis par M. G. Révoil, par M. E. Oustalet.]

M. Oustalet contributes to M. Révoil's volume an account of the birds collected in Somali-land. They consisted of 29 specimens, referable to 21 species. Amongst them is a new Bee-eater, named *Merops revoillii* and figured. Other little-known species are *Lanius dorsalis* and *Amydrus blythi*.

10. *Pelzeln on Birds from Ecuador.*

[Ueber eine Sendung von Säugethieren und Vögeln aus Ecuador. Von August von Pelzeln. Verh. der k.-k. zool.-bot. Gesell. Wien, 1882, p. 443.]

Herr v. Pelzeln gives an account of a collection of mammals and birds from Ecuador received by Graf Salis-Seewis and entrusted to him for determination. The birds are referred to about 60 different species, amongst which two are described as new under the names *Myiodioctes meridionalis* and *Elainia ferrugineiceps.* Other rarities are *Geothlypis semiflava, Setophaga bairdi, Conurus weddelli,* and *Attagis chimborazensis.*

11. *Pelzeln on Birds from Central Africa.*

[Ueber Dr. Emin Bey's dritte Sendung von Vögeln aus Central-Afrika. Von August von Pelzeln. Verh. der k.-k. zool.-bot. Gesell. Wien, 1882, p. 499.]

The present collection of the energetic Governor of the Equatorial Provinces of Egypt contains examples of 72 species, amongst which one (*Argya amauroura,* from Fadibek) is described as new. *Lanius pyrrhostictus,* lately discovered by Dr. Holub in the Central Transvaal, is also represented in the collection.

12. *Reichenow on the Birds of Zoological Gardens.*

[Die Vögel der zoologischen Gärten. Leitfaden zum Studium der Ornithologie mit besonderer Berücksichtigung der in Gefangenschaft gehaltenen Vögel. Ein Handbuch für Vogelwirthe. Von Dr. Ant. Reichenow. In zwei Theilen. 8vo. Leipzig: 1882.]

This is the first part of a new compendium of ornithology, with special reference to birds kept in zoological gardens. Little is given besides short descriptions of the principal genera and species, and an indication of their localities. The classification is peculiar, and begins with the Struthiones, advancing upwards. The present part concludes with the Owls.

13. *Ridgway on new Birds from the Commander Islands and Petropaulovsky.*

[Description of some Birds, supposed to be undescribed, from the Commander Islands and Petropaulovsky, collected by Dr. Leonhard Stejneger, U.S. Signal Service. By Robert Ridgway. Proc. U.S. Nat. Mus. 1883, p. 90.]

These new species are based on specimens in the collection of Dr. Stejneger, of whose interesting letters from Bering

Island we have already given a short notice (Ibis, 1883, p. 582). They are:—(1) *Haliaetus hypoleucus,* "perhaps an eastern representative of *H. albicilla,*" with the "entire underparts white;" (2) *Acrocephalus dybowskii*; (3) *Anorthura pallescens*; (4) *Hirundo saturata,* allied to *H. erythrogastra*; (5) *Anthus stejnegeri,* proposed as an alternative new name if the species be not identical with *A. japonicus* of the 'Fauna Japonica,' of which no copy is accessible to the describer!

14. *Ridgway on* Motacilla ocularis.

[On the probable identity of *Motacilla ocularis,* Swinhoe, and *M. amurensis,* Seebohm, with Remarks on allied supposed Species. By Robert Ridgway. Proc. U.S. Nat. Mus. 1883, p. 144.]

Mr. Ridgway considers that it is "conclusively proved" by the series of specimens in the National Museum that *M. ocularis* is "only the summer adult male of *M. amurensis,* which has the back black, while the fully adult female is undistinguishable from *M. ocularis,* or else that these two birds are identical, the former representing the adult male and the latter the adult female, or perhaps in winter both sexes." But see Mr. Seebohm's remarks, *suprà* p. 39.

15. *Ridgway on new Birds from Lower California.*

[Descriptions of some new Birds from Lower California. By Robert Ridgway. Proc. U.S. Nat. Mus. 1883, p. 155.]

These discoveries of Mr. Belding are named *Lophophanes inornatus cinereus, Psaltriparus grindæ,* and *Junco bairdi.*

16. *Ridgway on a new American Pipit.*

[*Anthus cervinus* (Pallas) in Lower California. By Robert Ridgway. Proc. U.S. Nat. Mus. 1883, p. 156.]

Mr. Ridgway was at first inclined to refer a single specimen of an *Anthus* obtained by Mr. Belding in Lower California in the winter of 1882–83 to a new species. Having found three specimens of the same species in a collection from the coast of China, he was led to make further researches, and finally to identify it with *Anthus cervinus,* which is thus introduced into the North-American list.

17. *Ridgway on* Merula confinis.

[Note on *Merula confinis.* By Robert Ridgway. Proc. U.S. Nat. Mus. 1883, p. 158.]

The type specimen of *Merula confinis,* discovered by Xantus at Todos Santos, in Lower California, in 1860, has hitherto remained unique. Mr. Belding has now, however, transmitted two additional examples, and there is no question that the species is one of "pronounced characters."

18. *Saunders's Edition of Yarrell's 'Birds.'*

[A History of British Birds. By the late William Yarrell, V.P.L.S., F.Z.S. Fourth Edition. Revised to the end of the Second Volume by Alfred Newton, M.A., F.R.S., continued by Howard Saunders, F.L.S., F.Z.S. Parts XV.–XX. November 1882–December 1883.]

The six parts issued during the past thirteen months contain the Pigeons, Pallas's Sand-Grouse, the Game-birds, Rails, Crane, Bustards, Plovers, and the majority of the Sandpipers. There is good reason to expect that the whole work will be completed by the middle of 1885.

19. *Schalow on Böhm's Collections from East Africa.*

[Die ornithologischen Sammlungen Dr. R. Böhm's aus Ost-Afrika. Nach den schriftlichen Notizen des Reisenden bearbeitet von Herman Schalow. Separatabdr. aus Cab. J. f. Orn. 1883.]

The present collection of Dr. Böhm contains examples of 161 species from Zanzibar, the Ugogo district, and Kakoma, mostly from the last-named locality (32° 29′ E. and 5° 47′ S.), which was the headquarters of the German Expedition for the exploration of Eastern Africa up to August 1881. Here, at the furthest point in a south-western direction in Eastern Africa that naturalists have yet reached, Central-African forms, such as *Parus rufiventris,* Bocage, hitherto only known from the interior districts of Angola, begin to be met with. The new species of Dr. Böhm's collections have been already described in the Journ. f. Orn., eight (*Melittophagus boehmi, Parisoma boehmi, Poliospiza reichardi, Parus griseiventris, Tricholais citriniceps, Drymœca pyrrhoptera, D. undosa,* and *Bradyornis grisea*) by Dr. Reichenow and one (*Chætura boehmi*) by Herr Schalow. Critical remarks and collector's notes are appended to each species. Another collection of Dr. Böhm's from the shores of Lake Tanganyika is on the road home.

20. *Stearns on the Natural History of Labrador.*

[Notes on the Natural History of Labrador. By W. A. Stearns. Proc. U.S. Nat. Mus. 1883, p. 111.]

Mr. Stearns gives a list of the mammals, birds, and plants collected during several expeditions along the coast which he made in 1875, 1880–81, and 1882, in company, on the last occasion, with a party of twelve young collegemen, by whom much good work was done. The birds enumerated, with short notes to each, are 111 in number, a few being added on the authority of Dr. Coues. Mr. Stearns asserts that *Somateria v-nigrum** is "abundant in large flocks in spring," though he does not appear to have secured specimens. The King Eider (*S. spectabilis*) was found breeding on a small island opposite Mingan by Mr. N. A. Comeau.

21. *Vorderman's 'Birds of Batavia.'*

[Bataviasche Vogels door A. G. Vorderman. Part IV. Overgedrukt uit het Natuurk. Tijds. Nederl. Indië, Deel xliii. Afl. i.]

The fourth part of Herr Vorderman's essays on Batavian birds contains descriptions of 23 species. *Coryllis* (melius *Loriculus*) *galgulus* is an addition to the Javan Psittacidæ. *Trichogramoptila* (q. *Munia*?) *leucogastroides* is one of the commonest birds round Batavia, and nests within the city.

22. *Watson on the Penguins.*

[Report on the Scientific Results of the Voyage of H.M.S. 'Challenger.'

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* Not *Somateria v-nigra* (as written), as the adjective should agree with *v*, which is neuter by tradition.

Zoology, Vol. VII. Part XVIII. Report on the Anatomy of the Spheniscidæ. By Prof. Morrison Watson, M.D., F.R.S.E.]

Prof. Watson's exhaustive treatise on the anatomy of the Penguins is based on specimens of eight species of this group collected during the voyage of the 'Challenger,' together with additional specimens from other quarters. The present Report relates only to the anatomy of the *adult* forms of these species, it being proposed to treat of the young and embryonic forms in a second memoir.

Taking the *Eudyptes chrysocome* of Tristan d'Acunha as a standard of comparison, the author enters at full length into the osteology, arthrology, myology, angeiology, neurology, and splanchnology of these birds with a completeness of detail which leaves little to be desired. He then proceeds to speak of the subdivision of the Spheniscidæ, and makes the following remarks on the generic divisions in general use:—

"The various species of Penguins which I have had an opportunity of examining have been arranged by ornithlogists, relying on the consideration of skins and feathers, into five genera, namely, *Aptenodytes*, *Pygosceles*, *Spheniscus*, *Eudyptes*, and *Eudyptila*. Such are the genera to be found in Gray's 'Hand-list of the Genera and Species of Birds,' and, with the exception of *Eudyptila*, in Sclater's Report on the Birds collected by the 'Challenger.' The examination of the complete anatomy of these birds appears to me, so far as the species examined are concerned, to lead to the conclusion that they ought all to be included within the limits of three genera—*Aptenodytes*, *Spheniscus*, and *Eudyptes*.

"In accordance with this view, the genus *Aptenodytes* would include the two species *longirostris* and *tæniatus*. The anatomy of these two birds, although presenting specific differences, does not, as it seems to me, justify their separation as types of *two* distinct genera, seeing that in every anatomical point which can be considered of generic value *Pygosceles* and *Aptenodytes* entirely agree. This much may certainly be said without fear of contradiction, that in respect of their anatomy, *Pygosceles* and *Aptenodytes* differ less from one another than do undoubtedly distinct species of either the genus *Eudyptes* or *Spheniscus.* In all essential points of their anatomy, moreover, these two birds differ similarly from that of the members of other genera."

From a second important disquisition, on "the origin of the Penguins," we extract the following remarks:—

"So far as the metatarsal bones are concerned, it appears, from the observations of Gegenbaur, that even in those birds in which the metatarsal bones ultimately fuse to form a single undivided mass, these bones originally present the form of four distinct and separate elements. It seems therefore, if conclusions based upon embryology are of any value, that we must conclude that birds, as we now know them, were derived from an ancestral group, the members of which, along with other peculiarities, were possessed of at least four distinct and separable metatarsal bones. These four bones were originally separate and distinct, but subsequently became more or less completely fused together to form the single metatarsal bone which is characteristic of the majority of birds. Inasmuch as the Penguins retain the individuality of the separate metatarsal bones to a greater extent than other birds, it would appear that they are the modern representatives of a group which had diverged from the primitive avian stem at a time when as yet the metatarsal bones had neither lost their individuality nor had become fused together to form the single bone, which is one of the characteristics of the majority of birds of the present day.

"This conclusion can only be denied on the supposition that the earliest members of the group of the Spheniscidæ were derivatives from the avian stem at a period when the separate metatarsal bones had been already fused to form a single mass, as in modern birds, a supposition which appears to the last degree improbable, when we consider that, in accepting it, we must suppose that the avian metatarsal bones must, in the first instance, have undergone coalescence, and thereafter became differentiated from one another in the members of one particular group, and in one only. It would therefore appear that the group Spheniscidæ is one of considerable antiquity, and that it must have diverged from the avian stem at a time when as yet the metatarsal bones formed distinct and independent entities in the members of the entire class of birds."

Nineteen admirably executed plates illustrate this excellent memoir.

XII.—*Letters, Announcements, &c.*

We have received the following letters addressed to the Editors of 'The Ibis:'—

6 Oxford and Cambridge Mansions,
12th November, 1883.

Sirs,—No one who has perused the last Journal of the late W. A. Forbes, which is published in 'The Ibis' for October, can fail to admire the spirit with which, in spite of failing health, he attempted to carry out the project he had in view, and his devotion to the last to the cause of Ornithology. Nor will any one deny that the proposal made by Capt. Shelley in the same number of 'The Ibis,' to rename a species which Mr. Forbes procured on the Niger, *Ægialitis forbesi,* is a well-deserved tribute to his memory, although I am one of those who think that the practice of naming species after individuals is now-a-days far too common.

Circumstances which I need not here detail, led me to describe the same species in 'The Zoologist' for October, and to propose for it the name of *Ægialitis nigris.* On reflection, I think that I should have done better had I stated that I believed Capt. Shelley had proposed to call it *Ægialitis forbesi,* and had expressed my concurrence in that course.

Under the circumstances I propose that the name suggested by me should be treated as a synonym, and that the species should stand as *Ægialitis forbesi,* Shelley.

I am, &c.,
J. E. Harting.

74 Jermyn Street, St. James's,
November 16th, 1883.

Sirs,—Happening to be at Turin on Wednesday, the 31st of October last, I went to the shop of Signor Bonomi, the naturalist, of 7 Via Lagrange, who told me that a bird unknown to him had been brought in on the previous day by a *chasseur,* who said he had shot it near Turin, and who wanted it arranged to adorn the hat of his *inamorata.* Bonomi produced the bird in the flesh : I at once saw that it was a fine specimen of the "Yellow-billed American Cuckoo," *Coccyzus americanus* (Linn.). I was of course much interested in the discovery; for this species has never before been known to occur in Italy, though an example of its near relation, *Coccyzus erythrophthalmus* (Wils.), was shot near Lucca in 1858 and is now in the museum of Pisa.

Anxious to rescue this unique Italian specimen of the species from the ignominious fate in store for it (for I hold that the basest use to which a rare bird can be put is to be stuck on a woman's hat), I offered Bonomi 10 francs for the bird, and told him to suggest to the young man that a Kingfisher, a Golden Oriole, or some bright-plumaged exotic bird would make far more show in the young person's hat. He promised to do so, and seemed to have no doubt as to the success of the proposed arrangement. I called on the following day, and saw the bird skinned and nicely made up; but I was not able to carry off the prize, as the owner had not again been to the shop. I accordingly returned next morning, when Bonomi told me that the *chasseur* would not give up the bird for any consideration or at any price, saying that he had shown it to his young woman and promised it to her for her hat, and that therefore she must have that very bird and no other; and that he had, in fact, taken it away with him. I then wrote and told Professor Giglioli of Florence all about it, and went and found Count Salvadori of Turin, and took him to Bonomi's shop, and so put him on the scent. Have these gentlemen been more successful than I was? *Chi lo sa*? I hope so; for if not, this unique Italian specimen of *Coccyzus americanus* still adorns the hat of the inamorata of the Turin *chasseur.*

Yours &c.,

E. CAVENDISH TAYLOR.

Turin Zoological Museum,
November 23rd, 1883.

Sirs,—I think it will interest the readers of 'The Ibis' to know that a living pair, fully adult, of the recently described *Struthio molybdophanes* is in the aviary of Dr. Monaco, in Turin. The owner bought them in Antwerp last September. The female has grey feathers, like that sex of *S. camelus*.

I am, Yours &c.,
T. Salvadori.

[This supposed new species of Ostrich has, as we are informed, been described in a recent number of a periodical which has not yet reached this country, the principal distinction, we believe, being that the naked portions of the body are lead-coloured instead of red. Similar Ostriches are in the Jardin d'Acclimatation at Paris, and one was recently in the Zoological Society's Gardens in the Regent's park. The existence of this form has long been known to us, but we should never have thought of making a "new species" out of it.—Edd.]

Topclyffe Grange,
Farnborough, Beckenham, Kent.
December 13, 1883.

Sirs,—Mr. Seebohm, who, in his 'History of British Birds,' complains so feelingly of the "slipshod" way in which ornithological work has been of late done by himself and others, furnishes in that book (vol. ii. p. 286, note) a telling example of the truth of his complaint by his synonymical treatment of certain Shore-Larks. He prefaces his remarks (which are written in the spirit that commonly pervades his criticisms of the authors on whose labours his own book is based) as follows:—"Dresser, in his 'Birds of Europe,' has so confused the synonymy of the Asiatic species and races of Shore-Larks that I have had some considerable difficulty in disentangling the skein;" and, rushing in where more cautious ornithologists have feared to tread, rashly identifies Gould's *Otocorys longirostris* with the small pale Shore-Lark to which I, in my work on European Birds

(iv. p. 401), gave the name *Otocorys brandti.* I have now before me the type of my species, as well as 'The Ibis' for 1881, in which Mr. Scully has given a figure (p. 581) of the head of *O. longirostris*; and no unbiassed ornithologist can for a moment doubt that Mr. Seebohm has made an egregious "blunder" in uniting these two birds, as will easily be seen by the following comparison of their characters :—

OTOCORYS BRANDTI.	OTOCORYS LONGIROSTRIS.
Decidedly smaller than *O. penicillata.*	Decidedly larger than *O. penicillata.*
A conspicuous black capistral band, as broad as in many adult males of *O. penicillata.*	No black on the capistrum.
The black patch on the side of the neck separated from the black gorget by a very narrow white band, not an eighth of an inch in width.	The black patch on the side of the neck separated from the black gorget by a broad white band a quarter of an inch in width.
Bill short and stout.	Bill long and (judging from the figure) rather slender than stout.
Whole length 6·5 inches; wing 4·4; tail 3·3; tarsus ·82; bill from gape ·62.	Whole length 8·25 to 8·5 inches; wing 4·93 to 5·2; tail 3·6 to 3·75; tarsus ·92 to ·95; bill from gape ·8 to ·82.

Mr. Scully does not state whether in coloration *Otocorys longirostris* is as dark as *O. penicillata,* or is, like *O. brandti,* remarkable for the extremely pale tinge of its plumage. From this fact I infer that *O. longirostris* does not differ much in plumage from *O. penicillata.*

I am so averse to entering upon controversy that I should have followed my practice of leaving unnoticed the hostile comments of Mr. Seebohm, were it not that in the interests of science it would be wrong for me to allow an error of this kind to pass unchallenged. Surely a writer, who apparently affects the character of an ornithological critic with a special vocation to point out and supply the shortcomings of all his predecessors, should be a little more careful, and should compare specimens before committing himself to print.

That I was in error in referring *O. longirostris* to *O. peni-*

cillata I freely own—that is, if, as I suppose to be the case, the bird figured by Mr. Scully be really *Otocorys longirostris* of Gould; but it will be seen by my article that when I was writing in 1874, I could not, with the materials at my command, speak with certainty. Since that time so much has come to light that there is no excuse for Mr. Seebohm's further complicating matters by a "blunder" which can arise from carelessness only.

Yours &c.,
H. E. Dresser.

Liége, 7 Décembre, 1883.

Messieurs,—J'ai reçu avec une grande satisfaction le volume 'A List of British Birds' que votre Comité a eu la gracieuseté de m'envoyer.

Je l'ai étudié le jour même de sa réception avec le plus grand empressement, car les ornithologistes distingués qui l'ont élaboré donnent à ce livre une grande valeur.

J'ai été particulièrement heureux de voir la distinction qui est faite entre les espèces erratiques positivement observées dans la Grande Bretagne et celles dont l'indication dans votre pays est douteuse ou même positivement erronée. Un tel travail était très désirable.

Je me permets de vous soumettre quelques observations très courtes sur un petit nombre de points, *currente calamo*.

Je remarque que la 'List' énumère comme espèces des formes qui me semblent peu distinctes, p. e.:—*Pari britannicus* et *ater*, *Acredulæ rosea* et *caudata*, *Cincli melanogaster* et *aquaticus*, *Motacillæ lugubris* et *alba* et quelques autres encore.

Ayant vu à Heligoland, chez Mr. Gätke, le *Loxia* que vous citez comme *L. leucoptera*, il m'a paru que c'est la forme de l'ancien continent (palæarctique) si nommée *bifasciata* et non le *L. leucoptera* américain. Je crois du reste que ces deux formes ne sont pas spécifiquement distinctes.

En lisant le nom de *Chen albatus* je regrette qu'il n'y ait pas une note explicative sur les divers exemplaires de *Chen* observés en Europe, et que l'on donne généralement comme

Chen hyperboreus. Dans les collections je n'ai pas encore vu des exemplaires européens blancs d'*hyperboreus,* mais seulement des exemplaires ressemblant à la description ancienne de *cærulescens.* Une vérification de cet exemplaire tué en Europe, notamment en Orient, serait fort intéressante.

Je ne sais pas pourquoi le nom d'*arundinacea* (*Turdus arundinaceus,* Linné) est supprimé pour *Acrocephalus turdoides,* puisque vous ne l'adoptez pas non plus (ex Gmel.) pour l'*Acrocephalus streperus.*

Je fais la même observation pour *Sterna hirundo,* Linné, qui n'est pas cité.

Mais je n'attache pas grande importance à ces remarques, qui ne diminuent nullement la grande importance de votre travail, et que je ne fais qu'à titre de simple conversation.

Agréez &c.,

E. de Selys-Longchamps.

Forbes's Final Idea as to the Classification of Birds.

[At the end of Forbes's Journal, written in pencil, dated only *four* days before his death.]

"My final idea as to the classification of birds.—W. A. F., 10.1.83."

Superorder ODONTORNITHES.

I. Saururæ. 1.
II. Odontotornæ. 1.
III. Odontolgæ. 1.

Superorder RHYNCHORNITHES.

IV. Struthiones. 1.
V. Apteryges. 1.
VI. Rheæ. 1.
VII. Crypturi. 1.
VIII. Gallinæ. 3.
IX. Opisthocomi. 1.
X. Palamedeæ. 1.
XI. Eudromades (*a*). 7.
? Odontoglossæ.
XII. Semigallinæ. 2.
XIII. Psittaci. 1.
XIV. Lamellirostres. 1.
XV. Eretopodes (*b*). 3.
XVI. Impennes. 1.
XVII. Tubinares. 2.
XVIII. Pseudogryphi. 1.
XIX. Herodiones. 3.
XX. Accipitres. 1.
XXI. Steganopodes. 3.
XXII. Pluviales. 8.
XXIII. Columbæ. 2.
XXIV. Todiformes. 1.
XXV. Piciformes (*c*). 7.
XXVI. Coraciiformes. 2.
XXVII. Meropiformes. 8.
XXVIII. Passeres.

(*a*) EUDROMADES.

Rallidæ.
Psophiidæ.
Œdicnemidæ.
Otididæ.
Cariamidæ.
Serpentariidæ.
Phœnicopteridæ.

(*b*) ERETOPODES.

Colymbidæ.
Podicipitidæ.
Heliornithidæ.

(*c*) PICIFORMES.

Picidæ. Capitonidæ.	Suborder *Pici.*
Bucerotidæ. Upupidæ. (Irrisoridæ ?) Alcedinidæ. Coliidæ. Momotidæ.	Subord. *Halcyones.*

[The numbers after the orders evidently denote the number of families comprised in each order.—EDD.]

The New Bird-Gallery at South Kensington.—The mounted collection of birds of the British Museum has now been transferred to South Kensington and arranged in the large gallery on the ground-floor to the left on entering the building, below that occupied by the Mammals. The main series of birds occupies 44 cases to the right and left of the central gangway, while the Struthiones and Tinami have been allotted to the large chamber at the end, where the Gould collection of Humming-birds has been likewise placed. The series of birds begins with the Accipitres to the left as one enters, and returning on the north side, concludes with the Penguins on the right. The arrangement of much of the collection can at present be regarded only as provisional, for in many instances representatives of very different natural families are mixed up together, as, we trust, will not ultimately be the case. But it cannot of course be expected that, in the transfer of such an enormous collection, every specimen can fall into its proper place at once. There can, however, be no question that, when reduced into proper order and accurately labelled, the series in the new Bird-gallery will be the finest in Europe, and will give even the casual visitor a grand idea of the extent and variety of the great class Aves.

The U.S. National Museum.—The recently issued Report of the Smithsonian Institution for 1881 contains the following account of the progress made in that year with the collection of birds:—

"In the department of birds there have been seventy-four accession lots. Under the direction of Mr. Robert Ridgway there has been much activity in this department in reorganizing the exhibition series of specimens and in eliminating duplicates from the storage series. There have been 4345 entries in the catalogue. The removal of the mammals and skeletons to the new building will give an opportunity for a much more satisfactory exhibition of the ornithological collections.

"The most important addition has been Mr. Ridgway's private collection of American birds, containing 2302 specimens of 778 species, especially important because the specimens have been selected in the field to illustrate variations of colour and form due to age, sex, and geographical location. In addition to numerous small collections, others of special interest have been received of the birds of Mexico and Yucatan from A. Boucard, of Paris; of Surinam from C. J. Hering, of Paramaribo; of Grenada from J. G. Wells, of Saint Andrews; of Guatemala from L. Guesde; of Dominica from Dr. H. A. Nichols; of Costa Rica from J. C. Zeledon; of Japan from Dr. F. C. Dale, U.S.N.; of Florida from Messrs. J. Bell and S. T. Walker; of Wyoming from Charles Ruby; of Indiana from Mr. Ridgway; and of Illinois from Mr. L. M. Turner.

"Mr. Ridgway gives the following census of the bird collection:—

Reserve series:	
Mounted specimens	7,000
Skins	40,000
Total reserve	47,000
Duplicates	8,000
Total	55,000

The National Museum of Lisbon.—Our excellent correspondent Prof. J. V. Barboza du Bocage, having accepted office in the present Portuguese Government, has, for the present, given up the Directorship of the Zoological Section of the National Museum of Lisbon (to which institution he has, as we all know, for a long period devoted much time and attention) to Dr. Fernando Mattroso. The Museum, which I have lately had the pleasure of visiting under Prof. Bocage's guidance, occupies a series of five rooms in the Escuola Polytechnica at Lisbon. The ornithological portion is divided into three sections: (1) the general series, (2) the native birds of Portugal, (3) the birds of the Portuguese colonies in West Africa. The last is the most important, as containing the specimens described in Prof. Bocage's lately finished work on the Birds of Angola. It contains representatives of about 600 species, partly mounted and partly in skin. Amongst some of the most prominent of these may be mentioned examples of *Stactolæma anchietæ, Elminia albicauda, Neocichla gutturalis, Hylypsornis salvadorii, Sharpia angolensis, Penthetria bocagii, Ardea calceolata,* and *Pelecanus sharpii,* many of which are the original types. In the Portuguese local series is a fine example of *Saxicola leucura* from near Coimbra, not hitherto generally known to occur so far west in Europe. In the general collection is a fine stuffed specimen of *Alca impennis,* presented by King Victor Emmanuel to his son-in-law, the present King of Portugal, in 1867, and an egg of the same bird, lately discovered among the débris of the old collections of the Museum. Senhor J. A. de Sousa, the present Custos of the Zoological Section of the Lisbon Museum, is an accomplished ornithologist, and has a new list of the birds of Portugal in preparation.—P. L. Sclater.

Bird-Notes from Mr. Layard (Brit. Cons. Nouméa, New Caledonia, Sept. 2nd, 1883).—"You ask for bird-news. Alas, I have none! I can't skin any more, as my left hand is stiffening. I have not seen a bird for months, except sparrows. I heard from Norfolk Island last week. My correspondent has found the *Gygis candida* breeding there, laying on the bare branch, as has been described; he sends eggs, which some day I shall send to Tristram. Also an egg which I really think is that of *Nestor productus*!! It was found on Nepean Island, and is quite unknown to the Norfolk islanders. I certainly think it is that egg. What else can it be? He sends to me for identification the skin of *Chrysococcyx lucidus*, not hitherto recorded from that island. The 'great Snipe' of the island turns out to be *Limosa novæ-zealandiæ*, and the 'little Snipe' *Charadrius xanthocheilus*. The 'Sitterrack' is *Anous leucocapillus*. He has sent a *Zosterops* in alcohol, all *bright yellow*. This phase of plumage is not very uncommon. Is it not the result of breeding in and in? *Fresh blood* would never reach their small island. I have asked him to investigate the breeding of the Petrels, and if they vary with sex or age. This is all I can do in the bird line."

New Works in Progress.—The next two volumes of the 'British Museum Catalogue of Birds' to be published will contain the Cinnyrimorphæ (families Nectariniidæ and Meliphagidæ) by Dr. Gadow, and the Dicæidæ, Hirundinidæ, Motacillidæ, Mniotiltidæ, and Ampelidæ by Mr. Sharpe. The former of these is nearly through the press.

Mr. Salvin has most of the plates drawn for a monograph of the Petrels (Tubinares), to which group, as we all know, he has for some years devoted special attention.

Dr. Buller, we understand, has in contemplation a new work on the Birds of New Zealand, to be illustrated by coloured figures of all the species, and has invited Mr. Keulemans to run over and do the drawings for him!

Mr. R. Wardlaw-Ramsay is preparing a catalogue of the magnificent collection bequeathed to him by the late Lord Tweeddale.

Capt. Shelley has in contemplation a list of the described species of African birds.

Mr. H. E. Dresser is projecting a monograph of the Rollers (Coraciidæ) as a companion to his nearly ready volume on the Bee-eaters (Meropidæ), of which the prospectus is now before us.

Rare Birds in Andalucia.—Lord Lilford writes:—"It may interest you to hear that I have lately received a pair of *Cursorius gallicus*, which were killed in the Marisma de Lebrija, not far above San Lucar de Barrameda, on 20th August ult. These are the first that I have received from Spain, though the bird has been now and then met with near Malaga. I also received three good skins of *Hydrochelidon leucoptera* from the Coto de Doñana, on the other side of the Guadalquivir. Neither Irby nor I ever obtained this bird from Andalucia before. I believe that it has been met with at Valencia, or rather at the Albufera, about seven miles from that town; but the Guadalquivir is very far west for this eastern species."

The Birds of the Bonin Islands.—The Bonin group of islands, which lie north of the Carolines and some 500 miles S.E. of Japan, seem to have been entirely neglected by naturalists since they were visited in 1828 by F. H. v. Kittlitz. Kittlitz tells us that he met with fifteen species of birds in the Bonin Islands, besides ascertaining the existence of nine or ten others. In his memoir ('Ueber die Vögel der Inselgruppe von Bonin-sima,' Mém. prés. Acad. Sc. St. Pétersbourg, i. p. 231, 1831) he describes and figures several remarkable and little-known species (*Ixos familiaris, Sylvia diphone, Fringilla papa, Oriolus squamiceps*) peculiar to the group. The Bonin Islands being now Japanese territory and of easy access, we trust that some of our fellow-workers in Japan will not overlook this outlying part of their field of operations. A fresh investigation of this remote group would supply specimens of species scarcely known to us, and probably lead to the discovery of others new to science.

Dr. Fischer's East-African Collections.—Dr. G. A. Fischer (of whose expedition we spoke in our last issue, 'Ibis,' 1883, p. 583) has returned to Berlin with his collections from the Masai country and the base of Kilima-ndjaro. There are said to be about thirty species of birds new to science in the series, and amongst them the finest Touracou (*Corythaix*) yet discovered. A special meeting of the Deutsche Ornithologische Gesellschaft has been held to do him honour.

THE IBIS.

FIFTH SERIES.

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XIII.—*Field-Notes from Slavonia and Hungary, with an Annotated List of the Birds observed in Slavonia.* By W. Eagle Clarke, F.L.S., M.B.O.U.

The following is an account of an ornithological trip undertaken by Messrs. Harrison, Tennant, and the writer during portions of the months of May and June of the present year (1883) for the purpose of visiting the Obedska Bara, an extensive marsh on the river Save, in Slavonia. It has been thought best to treat of it in diary form, giving a broad outline of our doings, and to conclude with a complete list of all the species of birds observed in Slavonia, a province whose avifauna seems to have received little or no attention at the hands of ornithologists; and it is hoped that the information thus afforded may be useful as a contribution towards filling up a gap in our knowledge of the distribution of birds in Europe.

We left London on the evening of the 11th of May, and after a few hours' halt at Vienna, arrived at Buda-Pesth on the morning of the 15th. Here it was necessary to make a short stay to present our letter of introduction to the British

Consul-General, through whose influence we hoped to obtain the necessary permit from the Hungarian government to enter the Obedska Bara, which is strictly preserved, and to engage the services of an interpreter to accompany us. In the evening we visited Margaret Island, the charming pleasure-resort of the Pesthians, situated in the middle of the Danube, about a mile above the city. Although this beautiful spot offered a great variety of attractions in the shape of gardens, baths, and military music, we wended our way to the barren shingly spit which forms the northern extremity of the island, and considered ourselves well repaid on finding, after considerable difficulty, a nest and eggs of the Little Ringed Plover. In the wooded portions of the island a pair of Hooded Crows had a nest within a couple of hundred yards of the band-stand; the Nightingale and Golden Oriole were singing on all sides, and we observed the Goldfinch, Hawfinch, Greenfinch, Tree-Sparrow, Wryneck, Jackdaw, Tawny Owl, and Sparrow-Hawk.

May 16th. In the morning we visited the Hungarian National Museum, a fine handsome building, which possesses really valuable collections in all departments of science and a large and able staff of curators, at the head of whom was Herr Pulszky Ferencz, a companion of Kossuth in the doings of 1848, and who had spent some years in England as a political refugee. We were received by him with the greatest cordiality, and were introduced to Dr. Madarász-Gyula, the curator in ornithology, a most courteous and obliging gentleman, with whom we went carefully over the Hungarian collection of birds. The afternoon we spent with Dr. Madarász in his large well-wooded town garden, where we found birds very numerous, and observed, among others, the Blackbird, Nightingale, Blackcap, Barred Warbler, Golden Oriole, Red-backed Shrike, Collared Flycatcher, Goldfinch, Serin, Greenfinch, Chaffinch, Jackdaw, Hooded Crow, Wryneck, Cuckoo, Kestrel, and Turtle-Dove, all of which were nesting there; while above soared a pair of *Aquila heliaca*, to us a strange sight to see above a city of 400,000 inhabitants.

May 17th. Under the guidance of Dr. Madarász we visited

Velencze, a somewhat shallow lake, about twenty-seven miles in length and one and a half in width, lying some twenty miles S.W. of Buda. On alighting at Dinyes we proceeded towards the village of Gardony along the margin of the lake, which consists of marshy meadow-land, and were gratified at the sight of a pair of Black-winged Stilts, many White Herons, several White-headed Ducks, Red-necked Grebes, White-winged Black Terns, and Marsh-Harriers, very many Great Crested Grebes, while among the less interesting were numerous Coots and Black Terns, a few Redshanks, Blue-headed and White Wagtails. At Gardony, after some delay, we procured four small flat-bottomed boats, and set off in different directions over the reed-beds which stud the centre of the lake, each in charge of a fisherman clad in a cotton divided skirt reaching below his knees, a coarse cloth tunic, and a pork-pie felt hat, who navigated the somewhat precarious craft with great skill, aided only by a long pole, with which, although it did not reach the bottom in most places, he managed to propel us with considerable speed. The result of our labours to procure both specimens and eggs was disappointing, for we only bagged a Purple Heron, a Great Crested Grebe, several Black Terns and Great Reed-Warblers; while several hours' really hard work among the reed-beds under a broiling sun only resulted in our finding the nests and eggs of the Great Crested Grebe and Coot in the utmost profusion. Several nests of the Great Reed-Warbler, a species of which the harsh notes resounded through the reeds on all sides, were ready for eggs, and it was noted that more than one of these were coated with that fine thread-like confervoid growth so common to stagnant waters. When afloat we made the following additions to the list of species already enumerated :—Eared Grebe, Little Bittern, Mallard, Pintail, White-eyed Duck, Avocet, Spoonbill, Penduline Tit, Little Grebe, Common Tern, Brown-headed Gull, and a large species of Gull, the identity of which we had not a chance of ascertaining. With so many good things around us we could only account for our almost blank day by surmising that we were too early for eggs. We ceased, however, to wonder whence all the "grebe" of commerce comes from, after the immense numbers of Crested Grebes observed on the limited area of the lake we were able to investigate. In the village of Gardony a Stork had young, and we added the Bunting, Swallow, and Turtle-Dove to our list. We returned to Buda-Pesth in the evening, and along with our interpreter went on board the S.S. 'Fiume,' which left for Semlin at 11 P.M.

May 18th. On going on deck in the morning we found we had arrived at the small town of Baja, whence, until Vukovar is reached, the Danube traverses a flat country, which is, however, abundantly timbered, thus relieving what would otherwise be considered monotonous scenery. In one or two places the banks are somewhat steep, and afford breeding-stations to numbers of Sand-Martins. At Vukovar the Fruska-Gora mountains run parallel to the river on the Slavonian side as far as the junction with the Theiss, being about a mile inland, so to speak, attaining a considerable height, probably over 2000 feet, and clothed to the summit with forest. The situation of many of the towns and villages was very picturesque, and that of Karlovic particularly so. During the day we observed many species of birds, including the following—the Raven, White-tailed Eagle, Black Kite, Cormorant, Black Stork, and Sandpiper. We arrived at Semlin at 10 P.M.

May 19th–21st. These days were spent in the miserable town of Semlin, where we endeavoured to find some ornithological work to do in the neighbourhood until our permit from the Government arrived; but in this we failed; nor were matters improved on crossing to Belgrade, which was only thirteen minutes by steamer. The situation of the latter city is extremely fine, but it is a poor place. We noted a Goldfinch feeding in the main street (the Terrasia); and observed a Jackdaw with a large white patch on its breast, giving it the appearance of a leviathan Ring-Ouzel.

May 22nd. Having found a Slav jäger who knew something about birds, we set off with him in one of the rough primitive carts of the country for the village of Dobanovci, about ten miles due west, where, as he told us, there are fine woods and marshes. On leaving Semlin the road passed over a large barren treeless common, above which hovered several Black Kites and a Raven, possibly attracted by the great numbers of that interesting little animal *Spermophilus citellus*, which abounded here. The cart-way (one cannot call it a road, for there was no attempt at formation) then passed through rich arable land, and Crested Larks became abundant, and a solitary Wheatear was observed. On approaching Dobanovci a row of acacias line each side of the roadway. Here the Lesser Grey Shrike was very common and noisy, and every now and then darted from the topmost twigs on to the stems of last year's maize, which here and there remained in the fallows. We procured some fine specimens, their crops being full of Coleoptera. A Hooded Crow had a nest, off which we shot the old bird, taking the five eggs it contained. At Dobanovci we found the village in holiday, it being the feast-day of the patron saint of the church; and were invited to join the inhabitants at their roasted pig and sheep, which were being cooked in primitive fashion in the churchyard, where, too, the festive board was spread. This we did, while the whole village looked on the first Englishmen they had ever seen. White Storks were very numerous, and nests occupied the tops of many of the chimneys. The natives have no regard whatever for this bird, and we might have had the eggs from any of the nests; but they, unfortunately, all contained young. Beyond the village was a long narrow and serpentine marsh, with beds of reeds and rushes, which could not be reached without a boat, owing to the depth of the water. On our approach numbers of Squacco Herons, Night-Herons, Little Egrets, Common Herons, and a few Purple Herons rose, and we bagged some fine specimens. Mallards, White-eyed Ducks, Great Crested Grebes, and Great Reed-Warblers were common, and we observed a single Little Bittern. We next visited a large oak-forest a few miles to the west, where Black Kites were very abundant, and soon found a nest, off which we shot the old female and obtained specimens of the young in down

—greyish-white little creatures a few days old. The nest was a flat structure of sticks, lined with finer sticks, pieces of moss, and a quantity of old red flannel. A nest of the Raven had large young, one of which was perched on its margin, after the manner of a young Rook. We also found the nests of the Red-backed Shrike, Blackcap, Barred Warbler, &c. Among other species we noted the Hawfinch, Wryneck, Creeper, Sombre Tit, Long-tailed Tit, and Roller, and a single specimen of the Icterine Warbler was obtained. This wood was remarkably rich in Lepidoptera, especially larvæ, among which we observed those of *Endromis versicolor* and *Cnethocampa processionea,* and found the imago of *Saturnia pavonia major*. The beautiful little green tree-frog was also abundant.

May 23rd. In the afternoon we left for the village of Obrez, about thirty miles S.W. of Semlin. Our route lay *viâ* Dobanovci. On arriving at the common just out of Semlin, we attempted to shoot a specimen of *Spermophilus citellus,* but were completely nonplussed; for the little creatures, on seeing us, immediately made for their burrows, which are bored perpendicularly into the ground, and here they stood and allowed us to take a sitting shot at twenty or thirty yards, but always dived into their holes to all appearance untouched. After half-a-dozen attempts we desisted, as cartridges were not obtainable thereabouts. Blue-headed Wagtails were common, but kept annoyingly near a herd of white oxen, thus preventing our getting specimens. On the marsh-meadows, near the village of Pijavicar, we saw a few Whinchats, all of which appeared to be much lighter in colour than our English bird; one of these we obtained, and found it had only the throat and fore neck pale rufous, the breast and abdomen being pure white. In the marsh here we found a nest of the Sedge-Warbler. We observed little else of interest during the day, and passed the night in a peasant's house at Petrovcic.

May 24th. We were *en route* a little after 3 A.M. The face of the country between this village and that of Asanja was much more diversified than any we had hitherto passed through, being a succession of woodland, coppice, marsh, and meadow. Hundreds of *Herodii* were passing overhead, including a party of Spoonbills, which our Slav driver informed us were locally known by a name equivalent to "Spoon-Geese." In a marshy meadow we came across some two hundred Glossy Ibises feeding; but they only permitted us to approach within about eighty yards, and then took flight: our driver termed them "Black Snipe." From Asanja our route for some miles was along a narrow path through an oak-forest, almost every tree of which was affected by mistletoe. Eagles were numerous, but only a momentary glimpse was caught of them between the trees. On emerging from the wood, we skirted the northern end of the Obedska Bara, which is here three quarters of a mile in width and much overgrown with reeds and sallows. We arrived at Obrez about noon, and found it a most miserable village. More than half of its turf-built houses were in ruins, and their dilapidated chimneys afforded suitable sites for the numerous nests of the White Stork. After luncheon, in the shape of beer, black bread, and a kind of sour cream-cheese made from sheep's milk, we accompanied a jäger to the wood and marsh on the north side of the village. In the wood was a nest of either the White-tailed or the Imperial Eagle (for both species were seen in the vicinity)—an immense structure, quite ninety feet from the ground, in a gigantic oak of such dimensions that climbing was entirely out of the question. Other birds were scarce, with the exception of the Great Spotted Woodpecker, which was abundant. The marsh was some miles in length, and here margined on both sides by forest, rendering it particularly secluded. A pair of Imperial Eagles occupied posts on a couple of dead trees close by; above soared a White-tailed Eagle, and over the marsh several Marsh-Harriers, Black Terns, and one or two White-winged Black Terns were hovering; while from the reeds there arose several White-eyed Ducks, Pygmy Cormorants, and Squacco Herons. On entering the marsh with our wading-boots (which were absolutely indispensable, owing to the prodigious numbers of leeches) we found that, in addition to the reed-beds and sallow-brakes, tussocks of sedge (*Cladium mariscus*) were numerously interspersed. The water was not deep, and in most parts under three feet. A few hours' hard work produced a nest of the Little Crake and several of White-eyed Duck, Mallard, and Coot. The nest of the Crake was on a sedge-tussock about six inches above the surface of the water, and occupied, not the centre, but the side of the tussock; it was a depression, amply lined with short broad pieces of reed-blade, and contained seven eggs. The nests of the Ducks were likewise on the tussocks. Among the reed-beds a species of water-snake was numerous, and when disturbed glided under water. The marsh-tortoise (*Emys europæa*) was also not uncommon. In the evening we set out for Kupinovo, not caring to remain the night in the wretched village of Obrez.

May 25th. In the morning we made a visit of inspection to the "bara," which, it may be well here to remark, is a horseshoe-shaped marsh, about ten miles in length and half a mile in width. It has evidently been at one time the northern bend of the river Save, which at this point now takes a similar curve to the south. Kupinovo is at the southern extremity of the eastern arm, so to speak, of the horseshoe. The surface of the "bara," with the exception of a strip of open water along the margin, is a mass of reed-beds and sallow-brakes; and although the water is very deep, yet this marsh is fast getting choked with vegetation, and in course of time will doubtless become quite grown up. We found the great colony of Herons about a mile north of the village and where the sallow-brake was densest. This breeding-station occupied a few hundred square yards in the centre of the "bara," and presented a most interesting sight. Seated on the bushes were hundreds of Squacco Herons, Little Egrets, Night-Herons, Glossy Ibises, Pygmy Cormorants, and many Common Herons; while in the centre, in an exclusive group, were fifty or sixty Spoonbills. Many other individuals of these species were busily engaged in breaking twigs and conveying them to their nests. Every now and then a panic seemed suddenly to seize this vast assemblage, and then there arose many thousands of birds hitherto hidden, most of which soon settled down and were again lost to sight, and things remained as before. Marsh-Harriers were extremely abundant, and six or eight were seen on the wing at once. White-eyed Ducks, Black Terns, and Mallards occasionally rose; Crested Grebes and Coots floated lazily on the open water; White Wagtails ran nimbly on the margin at our feet; Great Reed-Warblers sent forth their vigorous but unmusical notes from the reeds; while overhead we observed, as we reclined on the bank, a pair of Black Storks, an Imperial and a Booted Eagle. Such was our introduction to the bird-life on the Obedska "bara." In the afternoon a peasant brought a fine dark form of the Barn-Owl, in which the under-parts were rich orange-brown, the upper parts chiefly dark bluish grey.

A Government official arrived from Semlin, with our anxiously awaited permit. In the evening we made an attempt to enter the "bara" in a flat-bottomed boat; but, after a resolute tussle, we were compelled to desist, and to admit that an entrance direct was not to be forced. We made arrangements for the boatmen to be in readiness at 3 A.M., in the hope that by an early start the intense heat of the later morning might be avoided.

May 26th. For some reason or other our boatmen were full of excuses, and it was only by dint of considerable pressure that the boat was forthcoming after a most annoying delay. At last we were afloat, with our two Slav boatmen occupying the stern, from which they plied their short-handled paddles. Our plan was to attempt to enter the colony by approaching from the middle of the "bara." To do this, we started about a mile below the colony; and for some time all went well, as we passed rapidly up an open lane between reed-beds, of which the surface was covered with the beautiful flowers and leaves of the white water-lily. Afterwards several reed-beds were penetrated, from which many White-eyed Ducks, several Pochards, and a pair of Gadwalls were disturbed; but difficulties increased, and after two hours we were compelled to retire to the margin and commence anew. Paddling much nearer to the desired goal, we again essayed to enter; and after fighting our way through belts of sallows and reed-beds, over masses of floating vegetable matter and tussocks of sedge, and across open spaces thickly carpeted with that interesting aquatic plant *Stratiotes aloides*, we at last approached the outer fringe and caught glimpses of the blue eggs of the Ibis. Short work was made of the remaining barriers, and we were soon in the midst of an almost indescribable scene. On every side arose a vast body of birds, the beating of their pinions and their harsh notes producing quite a deafening sound; and soon the whole colony, estimated at 30,000, was on the wing, their confused flight resembling the gyrations of a swarm of bees. After a short interval they grew somewhat accustomed to our presence, and perched on the surrounding bushes, so close that the red eye of the Night-Heron and the yellow patches between the toes of the Little Egret were plainly to be seen, while they swayed about uncomfortably on the topmost twigs of the sallows along with the Glossy Ibis, Pygmy Cormorant, Common Heron, and Spoonbill. Around us were the nests and eggs of all these species save the Spoonbill. Those of the Ibis were in every instance on the surface of the water, or but very little above it, and were in the utmost profusion. The Night-Herons had their nests a few feet above the water, as had also the Squaccos and Little Egrets, though those of the latter were sometimes placed just above the surface. The structures of the Common Herons and Pygmy Cormorants were, as a rule, among the higher branches. In order to give some idea of the profusion in which these nests were, it is only necessary to say that in one bush were noted one nest of Common Heron, two of Pygmy Cormorant, three of Night-Heron, two of Little Egret, one of Squacco, and three of Glossy Ibis. Nor was this a singular instance, for most of the trees were equally laden. The nests of all these species were very similar in structure and materials, those of the Night- and Squacco Herons being composed entirely of sticks, the lining of those of the former species being arranged to radiate from the centre. The nests of the Pygmy

Cormorant consisted of sticks lined with finer sticks and roots; while sticks and a few reeds formed those of the Little Egret and the Glossy Ibis. The nests of the Egret and the Squacco were seldom to be seen in juxtaposition, probably on account of the pugnacious temperament of the latter. We had some trouble to get at the nests of the select party of Spoonbills, and had to push our boat over nests of Glossy Ibis, which it was impossible even with the greatest care to avoid. The nests of the Spoonbills were immense structures of sticks and dead reeds; some were only just above the water, while others were as much as four feet from the surface. When at the nests of this species a solitary individual of the White Heron was observed, the only one seen by us in Slavonia. It was rather surprising to find fresh eggs of the Common Heron and the Spoonbill at this date; which may perhaps be accounted for by the fact that the Herons are summer visitors only to this region; and probably all arrive much at the same time, the winter, I suspect, being too severe even for the former, which probably arrives somewhat earlier than the rest, as some few nests contained very young birds. The return journey was undertaken with light hearts after our success, and we reached Kupinovo at 3 P.M., finding on our way a newly hatched young of the Little Crake among some sedge, to which our attention was drawn by the loud clear note of the old bird. This little creature was glossy black with a beautiful dark green cast, and had bluish-grey legs.

The next two or three days were chiefly devoted to skinning birds and blowing eggs. On the 28th a native brought a nest containing a single egg of the Penduline Titmouse which he had cut from the slender twigs of a sallow. In the evening of the same day we added a nest and eggs of the Golden Oriole to our collection.

May 29th. Count Samuel Talacki, a Hungarian nobleman, on a shooting-expedition on the Save, shot on the "bara" a fine mature male of *Ardea bubulcus*, which we had the pleasure of examining soon after it was killed. Although this species has not been hitherto recorded as breeding in this part of Europe (indeed it is quite a stranger in Hungary, and this is the first recorded occurrence in the Hungarian States, according to Dr. Madarász), yet I think there can be little doubt that it had a mate and nest in the "bara." On this day, too, we saw a pair of fine young of Eagle-Owls in the possession of a peasant in the village, which he had taken from a wood in the Kupinsky Kut, a locality about ten miles S.E. of Kupinovo, during the first week in May.

May 30th. Left Kupinovo at 5 A.M. in a cart for Obrez, for another day in the marsh there. On the way several Hoopoes on the roadside and Booted Eagles on dead trees in the wood were observed. The marsh reached we entered under an intensely hot sun, and found the temperature of the reed-beds somewhat akin to that of an oven. On the tussocks of sedge nests of the White-eyed Duck and Mallard were numerous: one of the former contained fourteen eggs and was margined with brownish-black down, having greyish tips at the point of insertion. A nest of the Water-Rail was also found in a similar situation; it contained ten eggs and was a depression amply lined with dry reed-blades. A Sombre Tit uttered its peculiar notes from a willow, and from its constant presence we presumed it had a nest at hand; but this we failed to find. On leaving the marsh for a siesta at midday we disturbed an Eagle, which we took for a Spotted Eagle, which flew lazily to a tree and allowed us to pass beneath, seeming to be well aware that there was not a gun in the party, a fact accounted for by reason of the marsh being preserved and to avoid complications. In the afternoon we again entered the marsh and found the nests of the White-eyed Duck almost a nuisance, but at length came across something good in the shape of a nest of *Locustella fluviatilis,* from which we put off the old bird. The nest was a deep cup-shaped structure composed entirely of the broad dry blades of reed, and soon fell to pieces when removed from the centre of the tussock of sedge in which it was buried, under the dead growth of former years: it contained five fresh eggs. An attempt was then made to reach the breeding-place of the

Terns; but after sinking over the tops of our wading-boots we were only able to obtain a few eggs of Black Tern, which were in large nests of dead and wet reed-stems placed on floating masses of the same. The breeding-place of the White-winged Black Tern was beyond our reach. By the roadside, on returning to Obrez, a small party of Bee-eaters was seen. In the evening we returned to Kupinovo.

May 31st. In the morning we procured a few eggs of Black Tern and a nest and eggs of Great Reed-Warbler from the bara, and while so doing were interested in watching an Imperial Eagle, which on making its appearance over the village was immediately bullied by a Black Kite and a White Stork. In the afternoon a visit was paid to the large wood between the eastern and western arms of the bara, where we found a nest of the Black Stork, from which the old bird flew on our approach. The nest was placed on a large branch about forty feet from the ground, but the immense girth of the tree precluded any attempt at climbing. A nest of the Penduline Tit, ready for eggs, was suspended among the outer twigs of a pollard poplar, and, like the one already obtained, was formed entirely of the down from the sallow-catkin, having the appearance of silky curled wool, and through this were interlaced a few dry grasses as if to lend additional strength. Both the nests of this bird which we obtained had two holes, one in front, the other behind. Quite low down in a decayed oak was a nest-hole and young of the Great Spotted Woodpecker.

June 1st. At 5 A.M. we bade farewell to Kupinovo, travelling by Progar, Becmen, and Dobanovci to Semlin. At first our road lay along the banks of the Save, which were in many places wooded; and here we observed the Hobby, a pair of Bee-eaters, Green Woodpeckers, and Goldfinches. On leaving the river we passed several small marshes, and noted the Purple Heron and Common Tern, and, nearer Dobanovci, the Wheatear and Blue-headed Wagtail and several Eagles. When between Becmen and Dobanovci we had a new experience in being followed for some miles by a wolf, attracted no doubt by a foal of tender age which trotted by the side of its dam, which was harnessed to our cart. Wolves are very numerous in this district, and perhaps in Slavonia generally, and since our visit to Dobanovci a party beat the wood and shot seven. As we entered Dobanovci no less than nine White Storks were soaring over the village at a great height, and one of these descended rapidly at an angle of 60° to a nest close to us, using its wings as a parachute by keeping them parallel with its legs, which were outstretched in the direction of the descent; the neck and head were lowered in the same direction, and altogether it presented a most remarkable appearance. During our trip we had abundant opportunity for studying the habits of this species and considered it rather an uninteresting bird than otherwise. As a rule, one of the parents was generally to be seen standing on the side of the nest in a most lethargic attitude. Sometimes when both were at the nest one of them (perhaps the male) made a loud hollow snapping noise, and went through the pantomimic performance, while so doing, of throwing back the neck and placing the crown of the head on the lower portion of the back. But to return. After some breakfast we took a small light punt into the marsh, but found the reed-beds so dense that it was quite impossible to penetrate them for any distance, and after some hard work were compelled to desist after having found only a few nests of the Great Reed-Warbler and one of the Moorhen. This was a disappointment, as the Little Bittern was not uncommon and probably nesting. Squacco Herons, Night-Herons, and White-eyed Ducks were numerous, and we observed also a few Common Terns and a solitary Penduline Tit, while in a vineyard on the margin was shot a male Stonechat; the latter an interesting type, having the head and back extremely black, the bay confined to a patch on fore neck, and the breast and abdomen silky white. In this marsh abounded huge specimens of *Lymnæa stagnalis* and *Planorbis corneus*, and *Paludina hungarica* was not uncommon; on the road from Dobanovci to Semlin we found eight nests of Lesser Grey Shrikes in the acacias; they were as large as those of a Blackbird, and were chiefly composed of a large species of chickweed, freshly plucked feathers, and wool; some contained six eggs. Arrived at Semlin at 6 P.M.

June 2nd. Arose at 4 A.M. and crossed to Belgrade, whence we took the steamer for Orsova; owing to the amount of flood, the river was in many places two or three miles in width. The country was flat on the Hungarian bank, hilly on the Servian; and in many parts both banks are well wooded. The birds observed were a solitary Gull-billed Tern, near Semendria, and many White-tailed Eagles, Black Kites, and Black Terns. At Bazias the river enters the mountains, and the scenery becomes extremely fine, culminating in the indescribable Kasan Pass, where the mighty river runs between precipitous cliffs, in many places 2000 feet in height, and in the narrowest part in a channel only 180 yards in width. Near the base of these cliffs on each side a road has been hewn out of the solid rock—the one on the right bank completed by Trajan in A.D. 103, and that on the left bank is a carriage-road of modern date. In this pass the Griffon Vulture appeared to be not uncommon, and several were seen on the wing or seated on the ledges far above. A pair of Ruddy Sheldrake, disturbed by the steamer, flew close by us. We arrived at Orsova at 4 P.M. and took a carriage to Turn Severin, in Roumania, in order to see the celebrated Iron Gate. Eagles were very numerous over the forest-clad mountains of this part of Wallachia, and the Whinchat, Red-backed Shrike, White Wagtail, and, I think, Rock-Thrush were noted. We had now arrived at our journey's end and the beginning of our return; and it is enough to say that after a few days spent in the beautiful city of Pesth, we arrived home on the 8th of June.

It will be seen from the foregoing that the following list was compiled in the extreme S.E. corner of Slavonia, a district forming a narrow triangle of which Semlin is the apex, the Save the southern boundary, a line from Kupinovo to Obrez the western, and one from Obrez through Dobanovci to Semlin the northern. This tract of country is flat or gently undulating, about 200 feet above sea-level, and totally devoid of marked physical features. About Semlin much of it is rich agricultural land, further west it is chiefly clothed with extensive forests of old timber, mostly oak, and with numerous marshes of greater or less extent. A few species are added which were observed on the Danube between the confluences of the Drave and Save, where the river forms the N.E. boundary of the province. Further research, and especially an investigation of the Fruska-Gora mountains, lying to the north-west of the district indicated, and attaining probably a height of between 2000 and 3000 feet, would add many species to the list, for the influence of elevation on the avifauna of countries possessing similar physical characters is well known.

The list having been compiled between the 18th of May and the 2nd of June, it is fair to presume that all the species noted were breeding in Slavonia.

TURDUS MUSICUS, Linn.

We never saw this species, nor did we hear its song; but its nest and eggs were found in several of the woods.

TURDUS MERULA, Linn.

Did not appear to be a common species. Single birds were noted at Vukovar, Dobanovci, and Kupinovo.

SAXICOLA ŒNANTHE (Linn.).

Very local, and only noted on some poor land near Semlin, Dobanovci, and Becmen.

PRATINCOLA RUBETRA (Linn.).

Only seen in the marshy meadows near Pijavicar, and, as stated, was of a lighter type than ordinary British specimens, having the breast and abdomen dull white.

PRATINCOLA RUBICOLA (Linn.).

A solitary male seen and obtained in a vineyard at Dobanovci. An interesting specimen, in which the head and back are intensely black, with the faintest trace of the rufous edging to the feathers, the bay of the underparts is confined to a patch on the fore neck, and the breast and abdomen are silky white.

Daulias luscinia (Linn.).

Extremely abundant everywhere. I am not certain as to whether *D. philomela* occurs in Slavonia, but I have Hungarian specimens of that species in my collection.

Sylvia cinerea, Bechstein.

Only observed in the coppices about Petrovcic.

Sylvia atricapilla (Linn.).

A nest and eggs obtained in the woods at Dobanovci.

Sylvia hortensis (Bechstein).

A nest found in the wood at Kupinovo, on which the bird was seen.

Sylvia nisoria (Bechstein).

Common, and nesting in all the localities visited.

Hypolais icterina (Vieillot).

A solitary individual shot in the wood at Dobanovci on the 22nd of May. Probably this is the southern limit of its range in this part of Europe during the breeding-season.

Acrocephalus turdoides (Meyer).

Extremely abundant and breeding in all the marshes.

Acrocephalus phragmitis (Bechstein).

A nest and eggs found in the marsh at Pijavicar, and a few heard near Petrovcic. Evidently not a common bird.

Locustella nævia (Bodd.).

Not uncommon in the marshes at Petrovcic and Kupinovo.

Locustella fluviatilis (Wolf).

Probably abundant, along with many other Sylviinæ, but only detected by the finding of its nest and eggs in the marsh at Obrez on the 30th of May.

Acredula caudata (Linn.).

Observed in the woods at Dobanovci and Kupinovo.

Parus major.

Common.

Parus lugubris, Temm.

Several heard and seen in the woods at Dobanovci. One observed at Obrez.

Parus cæruleus, Linn.

Common.

Ægithalus pendulinus (Linn.).

Two nests obtained at Kupinovo and a bird seen at Dobanovci.

Sitta cæsia, Wolf.

Several seen in the woods at Kupinovo.

Motacilla alba, Linn.

The common Wagtail of the country.

Motacilla flava, Linn.

Local, but not uncommon about Semlin and Becmen.

Oriolus galbula, Linn.

Extremely common everywhere.

Lanius minor, Gmel.

Common: numbers nesting in the roadside trees about Dobanovci, and seen singly or in pairs at all the places visited.

Lanius collurio, Linn.

Very common.

Hirundo rustica, Linn.

Very common.

Chelidon urbica (Linn.).

Abundant.

Cotile riparia (Linn.).

A few observed at Obrez.

Certhia familiaris (Linn.).

One or two observed in the woods at Dobanovci.

Carduelis elegans, Steph.

Not numerous, but observed singly in several localities.

Ligurinus chloris (Linn.).

Extremely common.

Coccothraustes vulgaris, Pall.

Very common in all localities. In the wood at Dobanovci it was seen in parties of five or six on 22nd of May.

Passer domesticus (Linn.).

Very common.

Passer montanus (Linn.).

The commonest bird in Slavonia, and simply ubiquitous, appearing to be equally at home whether in the forests, marshes, villages, or on the roadsides.

Fringilla cælebs, Linn.

Extremely abundant.

Emberiza miliaria, Linn.

Very common.

Emberiza citrinella, Linn.

Observed in the woods only, where several nests were found. Not uncommon.

Emberiza schœniclus, Linn.

I am morally certain I saw a pair on the Obedska Bara. A rare bird so far south during the breeding-season.

Sturnus vulgaris, Linn.

Local; for it was only observed about Kupinovo, where it was common.

Garrulus glandarius (Linn.).

Common.

Pica rustica (Scop.).

Common, nesting in the sallows of the "bara" and in the trees in the village streets.

Corvus monedula, Linn.

Common at Peterwardein; a few were observed nesting in the church-steeples at Dobanovci and Kupinovo.

Corvus cornix, Linn.

Very common and particularly tame, nesting in trees on the roadside close to the villages.

CORVUS FRUGILEGUS, Linn.

Common, but local. Several large rookeries were observed.

CORVUS CORAX, Linn.

Observed in all the woods.

ALAUDA ARVENSIS, Linn.

Common.

ALAUDA CRISTATA, Linn.

Common on the roadside, especially in the vicinity of arable land.

CYPSELUS APUS (Linn.).

Very common.

DENDROCOPUS MAJOR (Linn.).

Extremely common in all the woods.

GECINUS VIRIDIS (Linn.).

Observed on the roadside trees about Kupinovo and Becmen.

IYNX TORQUILLA, Linn.

Two heard in the wood at Dobanovci.

CORACIAS GARRULA, Linn.

Very common; observed in the woodlands and trees by the roadside.

MEROPS APIASTER, Linn.

A small party seen at Obrez on the 30th of May, and a pair at Progar on the 1st of June.

UPUPA EPOPS, Linn.

Several observed on the wooded margin of the bara, near Kupinovo.

CUCULUS CANORUS, Linn.

Very common, especially in the woods.

STRIX FLAMMEA, Linn.

One seen at Petrovcic, and a fine dark variety procured at Kupinovo, in which the underparts are orange-brown, the upper greyish blue.

Bubo ignavus, Forst.

A pair of young birds seen, which had been taken from a nest near Kupinovo early in May.

Gyps fulvus (Gmel.).

A pair shot on the Save, above Kupinovo, by Count Talacki, on the 25th of May.

Circus æruginosus (Linn.).

Common on all the marshes, and particularly abundant on the Obedska Bara and at Obrez.

Buteo vulgaris, Leach.

Common in the woods.

Aquila pennata (Gmel.).

Common about Kupinovo and Obrez.

Aquila clanga, Pall. ?

I am not quite certain about this species; but there was certainly another *Aquila* observed in addition to *A. pennata* and *A. heliaca*.

Aquila heliaca, Savigny.

Common, and generally distributed.

Haliaetus albicilla (Linn.).

Common on the wooded banks of the Danube and Save, and several observed on the Obedska Bara and on the marsh at Obrez.

Milvus migrans (Bodd.).

The common bird of prey of the country, and to be seen not only in the villages but even in the town of Semlin.

Falco sacer, Gmel.

Observed on two occasions, at Obrez and at Dobanovci.

Falco subbuteo, Linn.

One seen at Progar.

Tinnunculus alaudarius (Gmel.).

Fairly common.

Phalacrocorax carbo (Linn.).

Several seen on the Danube at Dalya.

PHALACROCORAX PYGMÆUS, Pall.

Nesting very abundantly in the Obedska Bara. A few seen at Obrez.

ARDEA CINEREA, Linn.

Common. Many nesting in the Obedska Bara. One or two seen at Dobanovci.

ARDEA PURPUREA, Linn.

Not common, several seen on the Obedska Bara and at Dobanovci and Becmen.

ARDEA ALBA, Linn.

A single bird observed on the Obedska Bara, where it was once common; but persecution for the sake of its plumes has all but banished it.

ARDEA GARZETTA, Linn.

Nesting very abundantly in the Obedska Bara. A few seen at Dobanovci.

ARDEA BUBULCUS, Audouin.

An old male shot on the Obedska Bara on the 29th of May, where it no doubt had a mate. The first known occurrence in Hungary or her provinces.

ARDEA RALLOIDES, Scop.

The commonest and tamest of the Herons. Extremely abundant, nesting on the Obedska Bara and common at Dobanovci.

ARDETTA MINUTA (Linn.).

Observed only in the marsh at Dobanovci, where it was not uncommon.

NYCTICORAX GRISEUS (Linn.).

Nesting very abundantly on the Obedska Bara. A few at Dobanovci.

CICONIA ALBA, Bechst.

Very common, and nesting in all the villages.

Ciconia nigra, Linn.

Not common. A pair seen on the Danube at Palanka and several at Kupinovo, where they were nesting in a wood on the west side of the "bara."

Platalea leucorodia, Linn.

A large party breeding on the Obedska Bara: not seen elsewhere.

Plegadis falcinellus (Linn.).

Nesting in great abundance on the Obedska Bara. Not seen elsewhere.

Anas boscas, Linn.

Common, nesting in all the marshes.

Chaulelasmus streperus (Linn.).

A pair observed on the Obedska Bara on the 28th of May.

Fuligula ferina (Linn.).

Several observed on the Obedska Bara, where they were doubtless breeding.

Nyroca ferruginea (Gmel.).

By far the commonest Duck of the country. Breeds in all the marshes, and in great abundance in the Obedska Bara and the marsh at Obrez.

Turtur communis, Selby.

Very abundant.

Perdix cinerea, Latham.

A pair seen near Kupinovo.

Coturnix communis, Bonnat.

Extremely abundant.

Rallus aquaticus, Linn.

A nest with ten eggs found in the marsh at Obrez on the 30th of May.

Porzana parva (Scop.).

Probably common. A nest with seven eggs taken in the Obrez marsh on the 24th of May; and a young in down captured in the Obedska Bara on the 26th of May, whose plumage was glossy black with a beautiful dark green cast; legs bluish grey.

Crex pratensis, Bechst.
Heard commonly around Kupinovo and Petrovcic.

Gallinula chloropus (Linn.).
Not seen, but two nests and eggs found.

Fulica atra, Linn.
Very common in the Obedska Bara and at Obrez.

Vanellus vulgaris (Bechst.).
Appeared to be uncommon. Only a very few were seen on the margins of the Obedska Bara.

Tringoides hypoleucos (Linn.).
A few observed on the Danube, just below the confluence of the Drave, on the 18th of May.

Sterna fluviatilis, Naum.
Not at all common. One or two seen at Becmen and Dobanovci

Hydrochelidon leucoptera (Schinz).
Several seen on the marsh at Obrez.

Hydrochelidon nigra (Linn.).
Extremely common on the Danube and on all the marshes.

Podiceps cristatus (Linn.).
Common on the Obedska Bara and at Dobanovci.

Podiceps griseigena (Bodd.).
A pair observed on the Obedska Bara.

XIV.—*A Review of the Species of the Family* Icteridæ.—Part IV. Quiscalinæ. By P. L. SCLATER, M.A., Ph.D., F.R.S.

(Plate V.)

[Continued from p. 27, and concluded.]

To the last subfamily of the Icteridæ, the Quiscalinæ, which we now come to, I refer, for the present, the following eight genera:—

I. *Lampropsar*, p. 149.
II. *Scolecophagus*, 150.
III. *Dives*, p. 151.
IV. *Quiscalus*, p. 153.
V. *Macragelæus*, p. 162.
VI. *Hypopyrrhus*, p. 163.
VII. *Aphobus*, p. 163.
VIII. *Cassidix*, p. 164.

Genus I. LAMPROPSAR.

Lampropsar, Cab. Mus. Hein. i. p. 194 (1851): type *L. tanagrinus*.

Potamopsar, Scl. Cat. A. B. p. 141 (1862): type *L. tanagrinus*.

1. LAMPROPSAR TANAGRINUS.

Icterus tanagrinus, Spix, Av. Bras. i. p. 67, pl. 64. f. 1.

Lampropsar tanagrinus, Cab. Mus. Hein. i. p. 194; Scl. et Salv. Nomencl. p. 38.

Lampropsar guianensis, Cab. in Schomb. Guian. iii. p. 682, et Mus. Hein. i. p. 194; Scl. et Salv. P. Z. S. 1868, p. 167 (Venezuela), et Nomencl. p. 38.

Quiscalus (*Potamopsar*) *minor*, Scl. Cat. A. B. p. 141.

Potamopsar minor, Cassin, Pr. Ac. Sc. Phil. 1866, p. 415.

Potamopsar tanagrinus, Cab. Mus. Hein. i. p. 194; Pelzeln, Orn. Bras. p. 200; Scl. et Salv. P. Z. S. 1873, p. 267 (Ucayali).

Quiscalus, sp., Scl. et Salv. P. Z. S. 1866, p. 182.

Nigerrimus unicolor; plumis frontalibus brevibus exstantibus; rostro et pedibus nigris: long. tota 8·0, alæ 4·5, caudæ rotundatæ rectr. ext. 3·2, med. 4·1. *Fem.* Mari similis, sed crassitie minore: long. tota 7·5, alæ 4·0, caudæ rectr. ext. 2·8, med. 3·5.

Hab. Guiana, Venezuela et Amazonia.

Mus. P. L. S. et S.-G.

I have in my collection a female example of this bird obtained by Natterer at Barra do Rio Negro in July 1833. I have taken it to Berlin and compared it with the type of *L. guianensis.* As Herr v. Pelzeln had identified Natterer's bird by actual comparison with Spix's *I. tanagrinus* (*cf.* Orn. Bras. p. 201), I think we must adopt Spix's name for this species.

In my American Catalogue I registered this species as *Quiscalus minor*, supposing it to be *Icterus minor*, Spix, and made it the type of a new subgenus, "*Potamopsar*," but I now consider *Icterus minor*, Spix, to be nothing more than *Molothrus bonariensis.*

This form of the Quiscalinæ seems to be sufficiently characterized by the peculiar structure of the short erect frontal feathers. *Lampropsar dives* and *L. warcewiczi*, which in the 'Nomenclator' (following Cabanis) we arranged in this genus, appear to go better by themselves and nearer the true *Quiscali.*

Genus II. SCOLECOPHAGUS.

Scolecophagus, Sw. Faun. Bor.-Am. Aves, p. 494 (1831): type *S. ferrugineus.*

Euphagus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 413: type *S. cyanocephalus.*

Clavis specierum.

Rostro longiore, tenuiore: pileo dorso concolore . . . . (1) *ferrugineus.*
Rostro breviore, validiore: pileo purpureo . . . . (2) *cyanocephalus.*

1. SCOLECOPHAGUS FERRUGINEUS.

Oriolus ferrugineus, Gm. S. N. i. p. 393.

Gracula ferruginea, Wils. Am. Orn. iii. p. 41, pl. 21. f. 3.

Scolecophagus ferrugineus, Sw. Faun. Bor.-Am. ii. p. 286; Baird, B. N. Am. p. 551; Scl. Cat. A. B. p. 140; Cassin, Pr. Ac. Sc. Phil. 1866, p. 412; Baird, Brewer, et Ridgw. N. A. B. ii. p. 203; Blakiston, Ibis, 1863, p. 82 (Saskatchewan).

Scolecophagus niger, Bp. Consp. p. 423; Cab. Mus. Hein. i. p. 195.

Niger unicolor, nitore purpureo; alis et caudâ æneo lavatis, in vestitu autumnali plumis ferrugineo marginatis: long. tota 8·0, alæ 4·6, caudæ 3·5. *Fem.* Plumbeo-nigra, crassitie paulò minore.

Hab. Eastern States of N. America to the Missouri.

Mus. P. L. S. et S.-G.

2. SCOLECOPHAGUS CYANOCEPHALUS.

Psarocolius cyanocephalus, Wagl. Isis, 1829, p. 758.

Scolecophagus cyanocephalus, Cab. Mus. Hein. i. p. 195; Baird, B. N. Am. p. 552; Scl. Cat. A. B. p. 140; Cassin, Pr. Ac. Phil. 1866, p. 412; Baird, Brew. et Ridgw. N. A. B. ii. p. 206; Dresser, Ibis, 1869, p. 493 (Texas); Sumichrast, Mem. Bost. Soc. N. H. vol. i. p. 553; Blakiston, Ibis, 1868, p. 82 (Saskatchewan).

Scolecophagus mexicanus, Sw. An. in Menag. p. 302; Bp. Consp. p. 423.

Quiscalus breweri, Aud. B. Am. vii. p. 345, pl. 492.

Niger æneo lavatus; capite undique purpureo nitente: long. tota 9·2, alæ 5·0, caudæ 4·0. *Fem.* Obscurè fusca; alis extùs, dorso postico et caudâ æneo lavatis; lineâ superciliari obsoletâ.

Hab. Western and Central States of N. America and south to tableland of Mexica.

Mus. P. L. S. et S.-G.

Genus III. DIVES.

Dives, Cassin, Pr. Ac. Sc. Phil. 1866, p. 413: type *D. sumichrasti.*

The two larger species assigned to *Lampropsar* by Cabanis appear to me to go better near the true *Quiscali,* to which they have both been referred by other authors. Cassin has placed them in *Scolecophagus* under the subgeneric designation *Dives,* which I retain as a genus in its present position, adding thereto the so-called *Scolecophagus atroviolaceus* of Cuba, which agrees with them in most points of its structure.

Clavis specierum.

Æneo-niger:
  major: alis longioribus .... (1) *sumichrasti.*
  minor: alis brevioribus .... (2) *warcewiezi.*
Purpureo-niger: alis longioribus.................... (3) *atroviolaceus.*

1. Dives sumichrasti.

Lampropsar dives, Bp. Consp. p. 425 (1850); Cab. Mus. Hein. i. p. 194, et J. f. O. 1861, p. 83.

Quiscalus sumichrasti, De Sauss. Rev. Zool. 1859, p. 119; Sclater, P. Z. S. 1859, p. 365 (Jalapa), p. 381 (Oaxaca), 1864, p. 175 (City of Mexico), et Cat. A. B. p. 140; Scl. et Salv. Ibis, 1860, p. 398 (Guatemala); Sumichrast, Mem. Bost. S. N. H. vol. i. p. 553 (Vera Cruz).

Scolecophagus dives, Cassin, Pr. Ac. Sc. Phil. 1866, p. 413.

Nigro-sericeus unicolor; rostro et pedibus nigris: long. tota 10·5, alæ 5·0, caudæ rectr. med. 4·7, ext. 4·0. *Fem.* Mari similis, sed crassitie paulò minore.

Hab. Southern Mexico, Yucatan, Belize, and Guatemala.

Mus. P. L. S. et S.-G.

2. Dives warcewiezi.

Lampropsar warcewiezi, Cab. J. f. O. 1861, p. 83; Scl. et Salv. Nomencl. p. 38; Sclater, P. Z. S. 1877, p. 523 (Lima).

Scolecophagus ——?, Sclater, P. Z. S. 1860, p. 277 (Babahoyo).

Quiscalus æquatorialis, Scl. Cat. A. B. p. 140 (1862).

Nigro-sericeus unicolor; rostro et pedibus nigris: long. tota 9·5, alæ 4·4, caudæ 4·5. *Fem.* Mari similis, sed crassitie paulò minore.

Hab. Western Ecuador and Peru: Babahoyo (*Fraser*); Balzar mountains (*Illingworth in Mus. S.-G.*); vic. of Lima (*Nation*).

3. Dives atroviolaceus.

Quiscalus atroviolaceus, d'Orb. in La Sagra's Cuba, Ois. p. 54, f. 19.

Scaphidurus atroviolaceus, Gray & Mitch. Gen. B. ii. p. 341; Bp. Consp. i. p. 426.

Scolecophagus atroviolaceus, Cab. Mus. Hein. i. p. 196;

Cassin, Pr. Ac. Phil. 1866, p. 415; Gundl. J. f. O. 1874, p. 134 (Cuba).

Atro-violaceus unicolor; alis caudâque nigris; caudâ paulum rotundatâ: long. tota 9·5, alæ 4·9, caudæ rectr. med. 4·0, ext. 3·7. *Fem.* Mari similis, sed crassitie paulò minore et minus nitida.

Hab. Cuba.

Mus. P. L. S. et S.-G.

Genus IV. QUISCALUS.

Quiscalus, Vieill. Analyse, p. 37 (1816): type *Q. versicolor.*

Quiscala, Licht. Doubl. p. 18 (1823): type *Q. versicolor.*

Scaphidurus, Sw. Phil. Mag. n. s. i. p. 437 (1827): type *Q. palustris.*

Chalcophanes, Wagler, Syst. Av. (sub *Graculâ*) (1827): type *Q. versicolor.*

Holoquiscalus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 404: type *Q. crassirostris.*

Megaquiscalus, Cassin, op. cit. p. 409: type *Q. major.*

This very difficult series of birds, commonly classed as "*Quiscalus,*" I will consider under the subgeneric heads *Quiscalus, Megaquiscalus,* and *Holoquiscalus,* as arranged by Cassin.

a. QUISCALUS.

Clavis subspecierum.

Corpore æneo-nitente unicolore	*æneus.*
Corpore versicolore:	
major: rostro robustiore	*versicolor.*
minor: rostro tenuiore	*aglæus.*

I cannot say I am satisfied as to the rather finely drawn distinctions between these three races of the old-fashioned *Q. versicolor.* It is very difficult to allocate some of the adult male specimens now before me decidedly, and impossible to do so in the case of the females and young birds; but mainly out of respect to the American ornithologists I retain the three forms as subspecies.

1. QUISCALUS VERSICOLOR.

Gracula quiscala, Linn. S. N. i. p. 165; Wils. Am. Orn. iii. p. 44, pl. 21. f. 4.

Chalcophanes quiscalus, Cab. Mus. Hein. i. p. 196.

Quiscalus versicolor, Vieill. Nouv. Dict. xxviii. p. 488, et Gal. des Ois. i. p. 171, pl. 108; Bp. Consp. p. 424; Sw. Faun. Bor.-Am. ii. p. 485; Baird, B. N. Am. p. 555; Scl. Cat. A. B. p. 140.

Quiscalus purpuratus, Sw. An. in Menag. p. 298 (?).

Quiscala nitens, Licht. Doubl. p. 18.

Quiscalus purpureus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 403; Baird, Brew., et Ridg. N. A. B. ii. p. 215.

Fuliginoso-niger; corpore purpureo et violaceo plus minusve variegato; capite et cervice undique saturatè violaceis aut purpureis; rostro et pedibus nigris: long. tota 12·0, alæ 7·6, caudæ 5·2. *Fem.* Mari similis, sed crassitie minore et coloribus dilutioribus.

Hab. Atlantic States of N. America.

Mus. P. L. S. et S.-G.

I have examined the types of *Quiscalus purpureus* of Swainson now in the Museum of the University of Cambridge, and find that they belong to this species.

1 *a.* QUISCALUS VERSICOLOR ÆNEUS.

Quiscalus versicolor, Baird, B. N. A. p. 555 (partim).

Quiscalus æneus, Ridgw. Pr. Ac. Sc. Phil. 1869, p. 134.

Quiscalus purpureus, var. *æneus,* Baird, Brew., et Ridgw. N. A. B. ii. p. 218.

Fuliginoso-niger, æneo sericeo perfusus; capite et collo undique nitidè violaceis aut purpureis.

Hab. Central States of North America north to Manitoba.

Mus. P. L. S. et S.-G.

1 *b.* QUISCALUS VERSICOLOR AGLÆUS.

Quiscalus baritus, Baird, B. N. A. p. 556.

Quiscalus aglæus, Baird, Am. Journ. Sc. 1866, p. 84; Cassin, Pr. Ac. Sc. Phil. 1866, p. 404; Ridgw. Pr. Ac. Sc. Phil. 1869, p. 135.

Quiscalus purpureus, var. *aglæus,* Baird, Brew., et Ridgw. B. N. A. ii. p. 221.

Similis *Q. versicolori,* sed crassitie minore et rostro tenuiore.

Hab. Florida.

The only specimens of this smaller form of *Quiscalus versicolor* that I have seen have been kindly lent to me by the authorities of the Smithsonian Institution.

b. MEGAQUISCALUS.

Clavis specierum.

a. Rostro valido recto:	
corpore æneo: capite et collo purpurascentibus	(2) *major.*
corpore purpureo, posticè in æneum transeunte,	
crassitie maximâ	(3) *macrurus.*
crassitie mediâ	(4) *assimilis.*
crassitie minore	(5) *graysoni.*
b. Rostro tenui	(6) *tenuirostris.*

I have followed the lead of the authors of 'North-American Birds' pretty closely as regards these *Quiscali,* being unable to suggest any thing better. The only well-marked species is *Q. tenuirostris,* which is undoubtedly distinct, the other four being perhaps better treated of as subspecies on the American plan. The differences are hardly more than of size, although *Q. major* may, on the whole, be recognized by its more greeny sheen, only passing into purple on the head and neck.

2. QUISCALUS MAJOR.

Quiscalus major, Vieill. Nouv. Dict. xxviii. p. 487 (1819), et Enc. Méth. p. 900; Bp. Consp. p. 424; Sclater, P. Z. S. 1859, p. 58 (Omoa); Baird, B. N. Am. p. 555; Scl. Cat. A. B. p. 141; Dresser, Ibis, 1865, pp. 494 (Texas); Salvin, Ibis, 1866, p. 194 (Belize); Cassin, Pr. Ac. Sc. Phil. 1866, p. 409; Baird, Brew., et Ridgw. N. A. B. ii. p. 222; Lawr. Mem. Boston Soc. N. H. ii. p. 281 (N.W. Mexico); Coues, Ibis, 1870, p. 367.

Quiscalus corvinus, Sw. An. in Menag. p. 300.

Chalcophanes major, Cab. Mus. Hein. i. p. 196.

Niger æneo-nitens; capite et cervice undique in purpureum transeuntibus; rostro et pedibus nigris: long. tota 15·0, alæ 7·0, caudæ rectr. med. 7·0, ext. 4·5. *Fem.* Fumoso-nigra, æneo vix tincta; pileo brunneo; subtùs brunnea, medialiter albicantior; crisso dorso concolore; rostro et pedibus nigris: long. tota 11·0, alæ 5·30, caudæ 5·0.

Hab. Coast-region of South-Atlantic States: Texas and Belize.

Mus. P. L. S. et S.-G.

3. QUISCALUS MACRURUS.

Quiscalus macrourus, Sw. An. in Menag. p. 299; Bp. Consp. p. 424; Baird, B. N. Am. p. 554; Sclater, P. Z. S. 1856, p. 300 (Cordova, Mex.), et 1858, p. 358 (Honduras); Scl. et Salv. Ibis, 1859, p. 20 (Guatemala), 1864, p. 175 (City of Mexico), 1870, p. 837 (Honduras); Nomencl. p. 38; Taylor, Ibis, 1860, p. 112; Scl. Cat. A. B. p. 141; Cassin, Pr. Ac. Sc. Phil. 1866, p. 419; Scl. et Salv. Nomencl. p. 38.

Chalcophanes macrourus, Cab. Mus. Hein. p. 196, et J. f. O. 1861, p. 82 (Costa Rica).

Quiscalus major, var. *macrurus*, Baird, Brew., et Ridgw. B. N. A. ii. p. 225; Lawr. Mem. Boston Soc. N. H. ii. p. 281 (North-west Mex.).

Nitidè atropurpureus, in dorso et ventre imo in æneum transiens; alis caudâque nigris æneo lavatis; rostro et pedibus nigris: long. tota 17·0, alæ 7·9, caudæ rectr. med. 8·8, ext. 5·3. *Fem.* Nigricanti-brunnea, in dorso et alis extùs æneo tincta; subtùs dilutior, fumoso-brunnea, crisso nigricante: long. tota 13·0, alæ 6·0, caudæ 6·5.

Hab. Mexico and Guatemala: Real del Monte (*Swains.*); Orizaba (*Botteri*); Oaxaca; Vera Paz and Dueñas (*Salvin*).

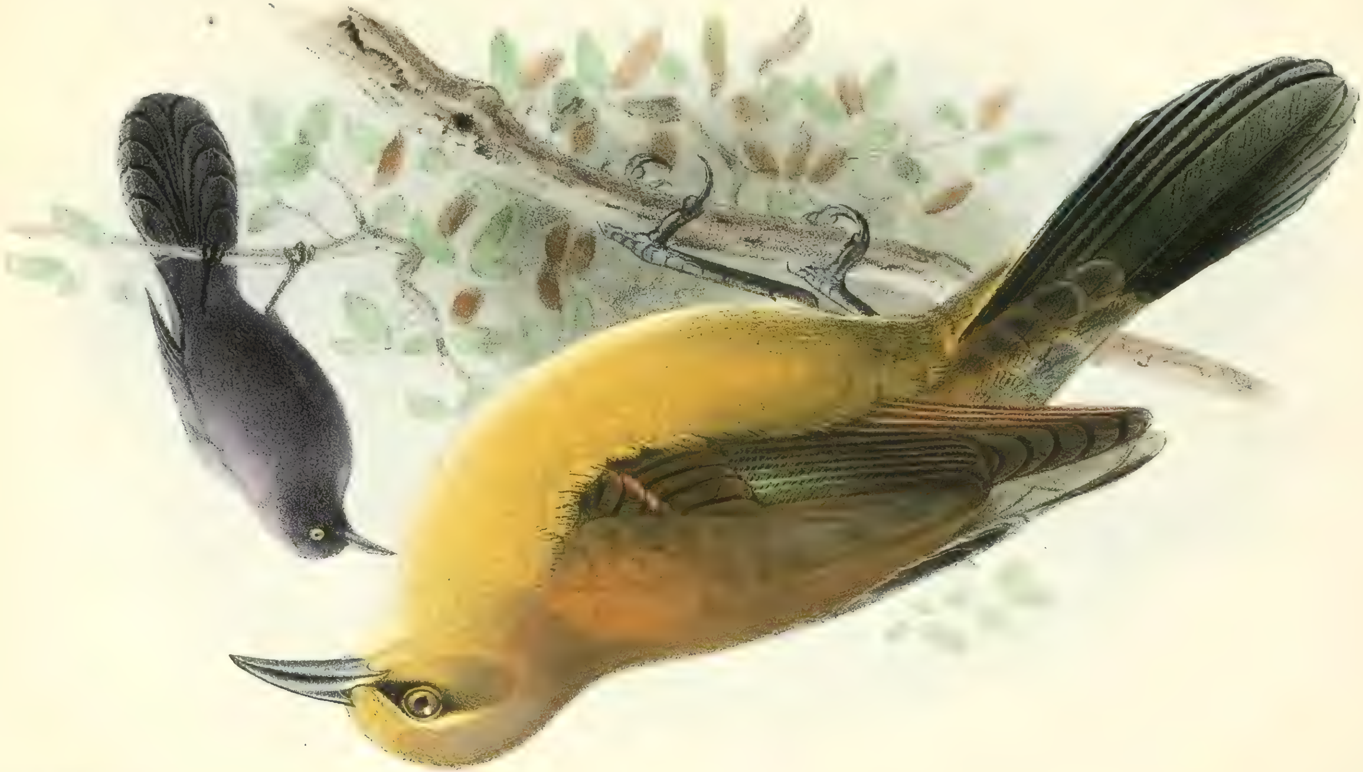
Mus. P. L. S. et S.-G.

4. QUISCALUS ASSIMILIS.

Quiscalus peruvianus, Sw. An. in Menag. p. 353 (1838); Cassin, Pr. Ac. Sc. Phil. 1866, p. 413 (?).

Quiscalus assimilis, Sclater, Cat. A. B. p. 141; Cassin, Pr. Ac. Sc. Phil. 1866, p. 310; Scl. et Salv. Nomencl. p. 38; Wyatt, Ibis, 1871, p. 330 (Colombia); Tacz. P. Z. S. p. 323 et p. 751 (Western Peru).

Quiscalus macrurus ?, Salv. P. Z. S. 1871, p. 191 (Veragua).



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Præcedenti similis, sed crassitie minore: long. tota 14·5, alæ 6·9, caudæ rect. med. 7·2, ext. 4·6.

Hab. Veragua, Panama, Colombia, and Western Peru.

Mus. P. L. S. et S.-G.

The name *assimilis* was based upon Bogota skins, which are always much contracted. Veraguan examples are rather larger.

If the Peruvian bird is exactly similar, it is probable that Swainson's name should be employed for this form. But Swainson's types are not at Cambridge, and I have not been able to find them, if they are still in existence.

5. QUISCALUS GRAYSONI, sp. nov.

Quiscalus palustris, Cassin, Pr. Ac. Sc. Phil. 1861, p. 411.

Quiscalus major, var. *palustris*, Baird, Brew., et Ridgw. N. A. B. ii. p. 214; Lawr. Mem. Boston Soc. N. H. ii. p. 282 (N.W. Mexico).

Similis *Q. macruro*, sed crassitie minore quam *Q. assimilis*: long. tota 14·5, alæ 6·6, caudæ rectr. med. 6·5, ext. 4·5.

Hab. Mazatlan, Mex. (*Grayson*); Presidio, W. Mex. (*Forrer*).

Mus. S.-G.

This is a small Western Mexican form of *Q. macrurus*, of which the adult is, I believe, quite indistinguishable from *Q. macrurus* in plumage, the specimens with brown thighs mentioned by Cassin and Lawrence being doubtless immature. It is very doubtful whether this form has any real claim to Swainson's title *palustris*; his specimens from the lakes near Mexico city were probably of the species which he afterwards described as *Q. tenuirostris*.

6. QUISCALUS TENUIROSTRIS. (Plate V.)

Scaphidurus palustris, Sw. Phil. Mag. n. s. i. p. 437 (1827)?

Quiscalus tenuirostris, Sw. An. in Men. p. 299 (1838); Cassin, Pr. Ac. Sc. Phil. 1866, p. 411; Baird, Brew., et Ridgw. N. A. B. ii. p. 214; Scl. et Salv. Nomencl. p. 38.

Atro-purpureus unicolor; alis et caudâ extùs nitenti-nigris; tibiis brunnescentibus; rostro tenui: long. tota 13·0, alæ 6·7, caudæ rectr. med. 7·0, ext. 4·3. *Jr.* Ferrugineo

aspersus. *Fem.* Suprà fusca, in dorso postico alis et caudâ nigricans; superciliis distinctis et corpore subtùs clarè ochraceo-fuscis; tibiis et crisso nigricantibus; rostro nigro, pedibus obscurè corneis: long. tota 10·5, alæ 5·2, caudæ rectr. med. 4·4, ext. 3·3.

Hab. Central Mexico; vicinity of Mexico city (*Boucard in Mus. S.-G.*).

Mus. P. L. S., S.-G., et Com. de Berlepsch.

I have little doubt, as I have said above, that this is the true *Q. palustris* of Swainson; but it will only create more confusion to supersede the very appropriate name *tenuirostris* given by the same author.

The species seems only to be found in Central Mexico. The figures (Plate V.) are taken from specimens in my collection.

c. HOLOQUISCALUS.

Under this head Cassin has placed the smaller species of *Quiscalus* which are distributed throughout the Antilles and into the northern portion of South America. In the Antilles each island appears to have its peculiar form, and I will therefore take the species geographically, beginning with Cuba.

Clavis specierum.

- **A.** Mas niger unicolor.
  - *a.* Feminæ nigræ, mari similes.
    - *a′.* Rroost recto,
      - crassitie majore .... (7) *gundlachi.*
      - crassitie minore .... (8) *niger.*
    - *b′.* Rostro incurvato,
      - rostro crasso: alis longioribus ...... (9) *crassirostris.*
      - rostro tenuiore: alis brevioribus .... (10) *brachypterus.*
  - *b.* Feminæ fuscæ, mari dissimiles*..........
    - (11) *inflexirostris.*
    - (12) *guadeloupensis.*
    - (13) *luminosus.*
    - (14) *fortirostris.*
    - (15) *lugubris.*

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* I am not sufficiently well acquainted with this group of species to attempt to give diagnoses.

7. QUISCALUS GUNDLACHI.

Quiscalus barytus, d'Orb. in La Sagra's Cuba, Ois. p. 120; Thienemann, J. f. O. 1857, p. 145.

Chalcophanes barytus, Cab. Mus. Hein. i. p. 197; Gundl. J. f. O. 1856, p. 15.

Quiscalus gundlachii, Cassin, Pr. Ac. Sc. Phil. 1866, p. 406.

Quiscalus baritus, var. *gundlachii,* Baird, Brew., et Ridgw. B. N. A. ii. p. 213.

Chalcophanes gundlachii, Gundl. J. f. O. 1874, p. 135.

Violaceo-niger; alis caudâque extùs æneo lavatis; rostro et pedibus nigris; rostro elongato, culmine recto: long. tota 12·0, alæ 5·8, caudæ rectr. med. 5·0, ext. 3·5, rostri a fronte 1·3. *Fem.* Mari similis, sed crassitie minore.

Hab. Cuba.

Mus. P. L. S. et S.-G.

8. QUISCALUS NIGER.

Troupiale noir de St. Domingue, Daub. Pl. Enl. 534.

Oriolus niger, Bodd. Table d. Pl. Enl. p. 31 (1783).

Quiscalus niger, Cassin, Pr. Ac. Sc. Phil. 1866, p. 407.

Quiscalus barita, Sallé, P. Z. S. 1857, p. 232.

Similis *Q. gundlachi,* sed crassitie minore et rostro tenuiore.

Hab. St. Domingo (*Cassin*).

Mus. Inst. Smithson. (teste Cassino), mihi nondum obvius.

9. QUISCALUS CRASSIROSTRIS.

Gracula barita, Linn. S. N. i. p. 165 (?).

Sturnus jamaicensis, Daud. Tr. d'Orn. ii. p. 317 (?).

Quiscalus crassirostris, Sw. An. in Menag. p. 355; Bp. Consp. p. 425; Gosse, B. Jam. p. 217; Scl. Cat. A. B. p. 359; Scl. et Salv. Nomencl. p. 38.

Quiscalus baritus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 405; Baird, Brew., et Ridgw. B. N. A. ii. p. 213.

Violaceo-niger; alis caudâque extùs æneo vix lavatis; rostro crasso, culmine incurvo: long. tota 10·5, alæ 5·7, caudæ rectr. med. 5·0, ext. 3·7, rostri a fronte 1·2. *Fem.* Mari similis, sed crassitie minore.

Hab. Jamaica.

Mus. P. L. S. et S.-G.

10. QUISCALUS BRACHYPTERUS.

Quiscalus brachypterus, Cass. Pr. Ac. Sc. Phil. 1866, p. 406; Scl. et Salv. Nomencl. p. 38.

Quiscalus crassirostris, Gundl. J. f. O. 1866, p. 188.

Chalcophanes brachypterus, Gundl. J. f. O. 1878, p. 177.

Chalcophanes lugubris, Sund. Öfv. K. Vet. Ak. Förh. 1869, p. 598.

Violaceo-niger; rostro et pedibus nigris: long. tota 10·5, alæ 5·0, caudæ rectr. med. 4·5, ext. 3·3. *Fem.* Mari similis, sed crassitie minore.

Hab. Porto Rico.

Mus. P. L. S. et S.-G.

11. QUISCALUS INFLEXIROSTRIS.

Quiscalus inflexirostris, Sw. An. in Men. p. 309 (1838); Cassin, Pr. Ac. Sc. Phil. 1866, p. 407; Scl. P. Z. S. 1874, p. 175; Lawr. Proc. U. S. N. M. i. p. 355, et p. 487 (Martinique); Semper, P. Z. S. 1872, p. 651 (St. Lucia).

Quiscalus barita, Taylor, Ibis, 1864, p. 168 (Martinique).

Quiscalus lugubris, Scl. P. Z. S. 1871, p. 271 (St. Lucia).

Niger violaceo splendens; alis caudâque æneo lavatis; rostro et pedibus nigris; rostri culmine incurvo, gonyde recto: long. tota 10·0, alæ 5·0, caudæ rectr. med. 4·5, lat. 3·5. *Fem.* Cineraceo-fusca, alis caudâque nigricantibus; subtùs dilutior, gutture et pectore albicantioribus; rostro nigro, pedibus obscurè carneis: long. tota 8·8, alæ 4·2, caudæ rectr. med. 3·4, ext. 2·8. (Specimina ex S. Lucia.)

Hab. St. Lucia (*Semper*); Martinique (*Taylor* et *Ober*).

Mus. P. L. S. et S.-G.

There is a mounted specimen of this species in the Cambridge Museum, which *may have been* the type of Swainson's description. At any rate, I think we are pretty safe in applying Swainson's name to this species, if distinct from *Q. lugubris* (of which I have some doubts!).

12. QUISCALUS GUADELOUPENSIS.

Quiscalus guadeloupensis, Lawr. Pr. U. S. N. M. i. pp. 457 & 487.

Similis *Q. inflexirostri* ex Martinicâ, sed crassitie paulò majore et rostro rectiore; colore feminæ quoque diverso. (*Lawrence.*)

Hab. Guadeloupe (*Ober*).

Mus. P. L. S.

I have a single skin of this Guadeloupe form in my collection. As it is not in perfect plumage I will not give an opinion upon the species further than saying that its distinctness from *Q. inflexirostris* seems open to question.

13. QUISCALUS LUMINOSUS.

Quiscalus, sp., Lawr. Pr. U. S. N. M. i. p. 191.

Quiscalus luminosus, Lawrence, Ann. N. Y. Acad. Sc. i. p. 162 (1878), et Proc. U. S. Nat. Mus. i. pp. 265, 487; Ober, Camps in the Caribbees, p. 247.

Similis *Q. brachyptero,* sed colore violaceo lætiore et tectricibus caudæ superioribus et inferioribus æneo-viridibus diversus. *Fem.* Obscurè fusca, subtùs obscurè cineracea, in gutture et pectore dilutior. (*Lawrence.*)

Hab. Grenada and Grenadines.

Mus. Nat. U. S. (mihi nondum obvius).

14. QUISCALUS FORTIROSTRIS.

Quiscalus fortirostris, Lawr. Pr. Ac. Sc. Phil. 1868, p. 360; Scl. P. Z. S. 1874, p. 175, et Ibis, 1873, p. 324 (Barbadoes).

Quiscalus rectirostris, Cassin, Pr. Ac. Sc. Phil. 1866, p. 409 (?).

Nigerrimus vix purpureo tinctus; rostro et pedibus nigris: long. tota 9·0, alæ 4·25, caudæ 4·2. *Fem.* Mari similis, sed crassitie minore.

Hab. Barbadoes.

Mus. P. L. S.

Obs. Similis *Q. lugubri,* sed crassitie minore; colore minus violaceo; necnon rostro breviore et magis crasso diversus.

The only specimen of this species I have ever seen is a single skin (probably of a female, from its small size), received in spirit in 1873, in my own collection. It is really curious that it should have been left to an American ornithologist to describe as new one of the commonest birds* in the English island of Barbadoes, and that there should be no specimens of it in our collections except a miserable skin taken from a specimen received in spirit.

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* *Cf.* Salvin's letter, Ibis, 1873, p. 334.

15. Quiscalus lugubris.

Quiscalus lugubris, Sw. An. in Menag. p. 299; P. Z. S. 1857, p. 265 (Amazons), et Cat. A. B. p. 141; Burm. Syst. Ueb. iii. p. 283; Cassin, Pr. Ac. Sc. Phil. 1866, p. 408; Taylor, Ibis, 1864, p. 84 (Trinidad).

Chalcophanes jamaicensis (♂) et *C. minor* (♀), Cab. in Schomb. Guian. iii. p. 683.

Chalcophanes lugubris, Finsch, P. Z. S. 1870, p. 577.

Quiscalus barita, Léotaud, Ois. Trin. p. 268 (Trinidad).

Purpurascenti-niger; alis caudâque extùs æneo lavatis; rostro et pedibus nigris: long. tota 8·2, alæ 4·3, caudæ rectr. med. 3·8, ext. 2·9. *Fem.* Fumoso-nigra, alis caudâque nigricantibus, subtùs vix dilutior: long. tota 8·2, alæ 4·0, caudæ rectr. med. 3·7, ext. 2·8. (Specim. ex Cayenne, maris in Mus. P. L. S., feminæ in Mus. S.-G.)

Hab. Venezuela and the Guianas.

Mus. P. L. S. et S.-G.

I have had a male specimen of this bird (of Cayenne make) in my collection since 1846! With the female I have only lately become acquainted from the specimen in the collection of Messrs. Salvin and Godman.

Genus V. MACRAGELÆUS.

Macroagelaius, Cassin, Pr. Ac. Sc. Phil. 1866, p. 13: type *M. subalaris*.

Cassin has classed this bird as an *Agelæus* under a different subgeneric heading. I think, however, that its long graduated tail constitutes it more probably a member of the Quiscaline group, although I agree with Cassin that it is better to treat it as entitled to rank as a genus.

1. Macragelæus subalaris.

Quiscalus subalaris, Boiss. Rev. Zool. 1840, p. 70; Bp. Consp. p. 525; Scl. Cat. A. B. p. 141, et P. Z. S. 1855, p. 153 (Bogota); Scl. et Salv. Nomencl. p. 38; Wyatt, Ibis, 1871, pp. 127, 330 (Colombia).

Agelaius subalaris, Cassin, Pr. Ac. Sc. Phil. 1866, p. 13.

Niger, nitens; subalaribus saturatè castaneis: long. tota 11·0, alæ 5·0, caudæ rectr. med. 5·7, ext. 4·3. *Fem.* Mari similis, sed crassitie minore: long. tota 9·0, alæ 4·5, caudæ 4·5.

Hab. Colombia: Paramo of Pamplona, alt. 10,000 feet (*Wyatt*).

Mus. P. L. S. et S.-G.

Genus VI. HYPOPYRRHUS.

Hypopyrrhus, Bp. Consp. i. p. 425 (1851): type *H. pyrrhogaster.*

1. HYPOPYRRHUS PYRRHOGASTER.

Cassicus pyrrhogaster, De Tarr. Rev. Zool. 1837, p. 252.

Hypopyrrhus pyrrhogaster, Bp. Consp. p. 425; Scl. P. Z. S. 1855, p. 154 (Bogota); Sclater et Salv. P. Z. S. 1879, p. 510 (Antioquia), et Nomencl. p. 39.

Quiscalus pyrrhogaster, Scl. Cat. A. B. p. 141; Cass. Pr. Ac. Sc. Phil. 1866, p. 412.

Coracino-niger; pilei et capitis laterum plumis filiformibus, incrassatis, nitentibus; lateribus, ventre imo et crisso ruberrimis; tibiis nigris; rostro et pedibus nigris: long. tota 12·0, alæ 5·5, caudæ rectr. med. 5·5, lat. 4·5. *Fem.* Mari similis, sed colore paulò dilutiore et crassitie minore.

Hab. Colombia: Antioquia (*Salmon*).

Mus. P. L. S. et S.-G.

The nearest affinities of this peculiar form appear to be with *Aphobus chopi,* which has the same singular structure of the head-feathers; but it does not show any traces of the furrows on the lower mandible which distinguish the adult male of the Chopi.

Genus VII. APHOBUS.

Aphobus, Cab. Mus. Hein. i. p. 194 (1851): type *A. chopi.*

1. APHOBUS CHOPI.

El Chopi, Azara, Pax. i. p. 282.

Agelaius chopi, Vieill. Nouv. Dict. xxxiv. p. 537 (1819), et

Enc. Méth. p. 713; Cassin, Pr. Ac. Sc. Phil. 1866, p. 11; Hartl. Ind. Azara, p. 5 (Paraguay).

Icterus unicolor, Licht. Doubl. p. 19; Max. Beitr. iii. p. 1208 (Bahia and Minas).

Icterus sulcirostris, Spix, Av. Bras. i. p. 67, pl. 64. f. 2 (Minas).

Agelaius sulcirostris, Sw. An. in Menag. p. 303.

Aphobus chopi, Cab. Mus. Hein. i. p. 194; Scl. Cat. A. B. p. 141; Cabanis, J. f. O. 1874, p. 85 (Cantagallo, Rio); Hamilton, Ibis, 1871, p. 303 (S. Paulo); Tacz. P. Z. S. 1877, p. 323 (Tumbez, W. Peru) et p. 750 (W. Peru); Forbes, Ibis, 1881, p. 339 (Pernambuco); Scl. et Salv. Nomencl. p. 39.

Psarocolius unicolor, Burm. Syst. Ueb. iii. p. 281, et La Plata Reise, ii. p. 494 (Mendoza).

Nigro-nitens unicolor; rostro et pedibus nigris, rostro inferiore longitudinaliter sulcato: long. tota 9·2, alæ 5·2, caudæ vix rotundatæ 4·0. *Fem.* Minùs nitens, crassitie minore et rostro non sulcato.

Hab. Paraguay, Northern La Plata and Southern Brazil northwards to Pernambuco: also Western Peru.

Mus. P. L. S. et S.-G.

There are perhaps two forms of this species, a stronger southern form from Paraguay and South Brazil (*A. chopi*), and a weaker northern form from S.E. Brazil (Bahia and Pernambuco), *A. sulcirostris.* I have not been able to examine Peruvian examples.

Genus VIII. CASSIDIX.

Scaphidurus, Sw. Faun. Bor.-Am. Aves, p. 494 (1831, nec Sw. 1827): type *C. oryzivora.*

Cassidix, Less. Trait. d'Orn. i. p. 433 (1831): type *C. oryzivora.*

Scaphidura, Sw. Class. B. ii. p. 272 (1837): type *C. oryzivora.*

Although I here follow Dr. Cabanis in associating this genus with the Quiscalinæ, I must confess that I think it would be better placed with the Cassicinæ, with which it agrees in the dilated frontal shield, naked nostrils, long wings, and rounded tail.

1. Cassidix oryzivora.

Oriolus oryzivorus, Gm. S. N. i. p. 386.

Cassidix oryzivora, Cab. Mus. Hein. i. p. 194; Cassin, Pr. Ac. Sc. Phil. 1866, p. 416; Scl. P. Z. S. 1858, p. 98 (Mexico), 1859, p. 57 (Honduras), 1859, p. 140 (Ecuador), et Cat. A. B. p. 142; Scl. et Salv. P. Z. S. 1864, p. 354 (Panama), 1867, p. 279 (Mosquitia), 1867, p. 573 (Para), 1867, p. 978 (Pebas), 1869, p. 252 (Venezuela), 1873, p. 185 (S. Peru), 1873, p. 267 (Upper Amazons), 1879, p. 510 (Antioquia), et Nomencl. p. 39; Salvin, Ibis, 1861, p. 353 (Centr. Am.), et P. Z. S. 1870, p. 191 (Veragua); Salv. et Godm. Ibis, 1879, p. 201, et 1880, p. 123 (Santa Marta); Berlepsch. J. f. O. 1873, p. 251 (South Brazil).

Tordo grande, Azara, Apunt. i. p. 273.

Cassicus ater, Vieill. Nouv. Dict. v. p. 363, et Enc. Méth. p. 723; Cassin, Pr. Ac. Sc. Phil. 1866, p. 415; Pelz. Orn. Bras. p. 201; Tacz. P. Z. S. 1877, p. 323 (W. Peru).

Cassicus niger, Licht. Doubl. p. 19; Max. Beitr. iii. p. 1241.

Psarocolius palliatus, Wagl. Syst. Av. no. 4.

Corvus (*Cassidix*) *mexicanus*, Less. Tr. d'Orn. p. 433.

Cassidix mexicanus, Cassin, Pr. Ac. Sc. Phil. 1866, p. 416.

Scaphidura barita et *S. crassirostra*, Sw. An. in Men. p. 301.

Cassicus palliatus, Tsch. Faun. Per. p. 229.

Scaphidura atra, Cab. in Schomb. Guiana, iii. p. 683.

Quiscalus ater, Bp. Consp. p. 426; Burm. Syst. Ueb. iii. p. 278.

Cassidix vielloti, Cassin, Pr. Ac. Sc. Phil. 1866, p. 417.

Atro-violaceus; colli plumis elongatis expansis; rostro et pedibus nigris: long. tota 14·0, alæ 7·8, caudæ rectr. med. 6·1, ext. 5·3. *Fem.* Mari similis, sed crassitie minore et ptilosi minus nitidâ.

Hab. Central and South America, from S. Mexico to Paraguay and S. Peru.

Mus. P. L. S. et S.-G.

I cannot agree with Cassin in dividing the different races of this widely spread bird into distinct species.

Appendix Specierum obscurarum.

I have now given an account of all the species of the family Icteridæ known to me. It has been based principally upon the examination of the specimens in my own collection and in that of Messrs. Salvin and Godman. In the case of the last three subfamilies, I have also had the advantage of consulting the series in the collection of my good friend Hans, Graf v. Berlepsch, who has most kindly sent his specimens over to me in aid of my researches. Out of the 127 species which I have enumerated above*, four only are not known to me *ex visu*†, but have been inserted in what seem to be their proper places on the authority of other authors. But there remain a few other described species which, although no examples of them have come under my observation, deserve to be mentioned in order that they may be kept in the memory of future investigators. These are:—

(1) *Cassicus melanurus,* Cassin, Pr. Ac. Sc. Phil. 1866, p. 66, from Guyaquil.

Of this bird, resembling *C. persicus,* but having the tail-coverts and entire tail *black,* there is said to be a specimen at Philadelphia received from the Massena collection. Is it not an artefact?

(2) *Cassicus leucurus,* Wied, Beitr. iii. p. 1245, from S.E. Brazil.

This white-tailed Cassique seems to be a very doubtful species, only known by the report of the Indians.

(3) *Molothrus cabanisi,* Cassin, Pr. Ac. Sc. Phil. 1866, p. 22, from Guiana and Santa Marta.

A uniformly coloured species allied to *Lampropsar guianensis,* but larger, is quite unknown to me.

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*	I. Cassicinæ (Ibis, 1883, p. 145)	27
	II. Icterinæ (Ibis, 1883, p. 352)	37
	III. Agelæinæ (Ibis, 1884, p. 1)	38
	IV. Quiscalinæ (Ibis, 1884, p. 149)	25
		127

† Namely *Molothrus armenti, Cyrtotes maxillaris, Quiscalus niger* and *Q. luminosus.*

(4) *Molothrus murinus,* Pelz. Orn. Bras., from Rio Janeiro (Natt.), is based upon two female specimens.

(5) *Agelaius pustulatus,* Sw. An. in Men. p. 303, from Brazil, if correctly described, is different from any thing that I have seen.

(6) *Idiopsar brachyurus,* Cassin, Pr. Ac. Sc. Phil. 1866, p. 414, from Bolivia, remarkable for its short tail and plumbeous plumage, is unknown to me. Is it an *Icterine* ? (Mus. Smiths. Inst.)*

(7) *Quiscalus mexicanus,* Cassin, op. cit. p. 408. A uniformly coloured species belonging to the group *Holoquiscalus,* which is likewise unknown to me.

XV.—*On a Collection of San Domingo Birds.*

By H. B. Tristram, D.D., F.R.S.

A small collection of birds lately made by Mr. C. McGrigor in the island of San Domingo has been placed in my hands for determination; and though it contains nothing new, yet so few collections reach us from that island, the natural history of which was perhaps better known a century ago than to-day, that an account of it may be of interest to some readers of 'The Ibis.' With the exception of some of the cosmopolitan Waders, all the species in the series have been already recorded from this locality; but some of them are rare, notably a large *Picumnus,* which has recently been described and figured by Mr. C. B. Cory under the name of *Picumnus lawrencii* (Bull. Nuttall Orn. Club, vol. vi. 1881, p. 129). Both male and female are contained in this collection, and I am satisfied that Mr. Cory's name must sink into a synonym of Sundevall's *P. micromegas* (Conspect. Av. Picin. p. 95). Sundevall described this species from a specimen in the Museum of Stockholm, which was hitherto, so far as I am aware, unique in European collections. But Mr. Cory observes that the specimen came from Brazil, and that he cannot make Sundevall's description agree with the Haytian bird. Now all that Sundevall says is, that the bird was in a very rich collection acquired in Brazil by the Swedish consul Westin, and made by Freyreiss. But the avifauna of Brazil is pretty well known, and it is scarcely probable that a Brazilian Woodpecker should have remained for nearly seventy years represented by a unique specimen, and there is no proof, or even assertion, of the real habitat of the type. Moreover, having before me the descriptions and measurements of Sundevall and Mr. Cory, I am unable to detect the most trivial discrepancy between them, and both exactly agree with Mr. McGrigor's male specimen. It is very probable that Sundevall's type came originally from Hayti, and his name therefore must stand.

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* P.S.—The authorities of the U. S. Nat. Museum have most kindly sent me this type for comparison. I propose to give an account of it in the next Number of this Journal.

Mr. McGrigor's collection contains the following species :—*Mimocichla ardesiaca, Mniotilta varia, Parula americana, Dendrœca cærulescens, Setophaga ruticilla, Dulus dominicus, Euphonia musica, Phœnicophilus palmarum, Loxigilla violacea, Phonipara bicolor, Icterus dominicensis, Quiscalus ater, Tyrannus dominicensis, Lampornis aurulentus, Picumnus micromegas* (=*P. lawrencii*, Cory), *Centurus striatus, Todus subulatus, Ceryle alcyon, Saurothera dominicensis, Conurus euops, Chamæpelia passerina, Columba leucocephala, Ardea cærulea, Ardea virescens, Ardea candidissima,* § *Ægialitis semipalmatus,* § *Strepsilas interpres, Phœnicopterus ruber,* § *Platalea ajaja.*

The three species marked § are not included by Dr. Bryant in his list of the birds of San Domingo (Proc. Boston Soc. Nat. Hist. vol. xi. p. 89).

Unfortunately no localities are given; but I believe the collection was made near Samana, on the N.E. of San Domingo. Mr. McGrigor expects shortly to spend some time in the mountains between Samana and Santiago, and we may hope that in his leisure time he may be able to add much more to our knowledge of the interior mountain region.

XVI.—*On some Eastern Owls.* By J. H. Gurney.

Having recently had the opportunity, through the kindness of Captain R. G. Wardlaw Ramsay, of examining the fine series of Strigidæ collected by the late Lord Tweeddale, I am desirous of recording a few remarks on some of the specimens in that collection, and also on a few of the Owls in the Norwich Museum.

The paper on a collection of birds from the district of Lampong in S.E. Sumatra, which was communicated by Lord Tweeddale to 'The Ibis' for 1877, contains a mention of two specimens of *Ninox scutulata*, which formed part of that collection, but only describes them, at p. 287, as "absolutely identical with the Malaccan individuals in mus. nostr." As this species was originally, but not very fully, described by Sir R. S. Raffles from a Sumatran example, I have thought it desirable to record the following additional particulars of the two specimens referred to in Lord Tweeddale's paper; they are very nearly of the same size, and measure as under, the sex not having been recorded:—

	Wing.	Tarsus.	Middle toe *s. u.*
No. 1	7·45	1·10	1·10
No. 2	7·50	1·20	1·00

In both specimens the fourth primary is the longest, but the third very nearly equals it; the axillaries are barred with alternate bands of white and dark brown, and the number of dark transverse bars on the tail is four.

Captain Wardlaw Ramsay's Museum contains four skins of a *Ninox* from the Nicobar Islands, which perhaps cannot be separated from *N. scutulata*, though it differs from the two Sumatran specimens above mentioned in the somewhat more ferruginous tints of the wing-coverts and of the dark markings on the under surface, especially the latter, in the more numerous dark caudal cross bars (five in three specimens and six in the fourth), and in two skins out of the four having the axillaries of an unbarred fulvous. In all these respects the birds in question approach the allied smaller species (*N. affinis*); but in size they agree better with *N. scutulata,* measuring as under—

	Wing.	Tarsus.	Middle toe *s. u.*
♀. Trinkut Island	7·80	1·00	1·10
♀. do.	8·00	1·05	1·20
Not sexed, only marked "Nicobars"	8·10	1·00	1·10
Ditto ditto	8·20	1·10	1·10

I subjoin for comparison the following measurements of three Andaman specimens of *N. affinis,* also in the possession of Captain Wardlaw Ramsay:—

	Wing.	Tarsus.	Middle toe *s. u.*
♂. Port Blair................	6·95	1·10	1·10
♂. do.	6·85	1·05	0·90
♀. do.	6·90	1·00	1·00

These three specimens all have five dark cross bars on the tail, and the axillaries are unbarred fulvous.

Mr. Hume states in 'Stray Feathers,' vol. iv. p. 285, that two "races" of *Ninox* occur in the Nicobar Islands, the smaller of which he identifies with *N. affinis*; but the only examples of *N. affinis* which I have personally examined are the three from the Andamans above referred to.

In Lord Tweeddale's list of a collection of birds from Zamboanga, in the island of Mindanao, published in the Proc. Zool. Soc. for 1878, he mentioned (p. 940) two specimens of *Ninox* which he there referred to *N. lugubris,* also quoting a remark of mine as to the remarkable rufous tint on the outer webs of the primaries in these two specimens; I have now re-examined them, and desire to add a note as to the colour of the paler interspaces on the tail, which, in both, are decidedly tinged with rufous, though not so brightly on the outer webs of the primaries. Both these specimens have five dark cross bars on the tail, and the axillaries are cross-barred with dark brown and fulvous alternately.

Amongst the races very nearly allied to *Ninox lugubris,* and, so far as I can judge, not really distinct from it, is *N. burmanica,* Hume. Captain Wardlaw Ramsay possesses several sexed examples of this form collected at Tonghoo, from which I have noted the following measurements, that may perhaps be worth recording :—

	Wing.	Tarsus.
Male	8·80	1·10
do.	8·60	1·20
Five females	8·50 to 8·95	1·10 to 1·20

An unsexed specimen in the same collection from Assam, apparently referable to the same race, has a wing-measurement of 9·10, with the tarsus 1·20.

One of the scarcer species of *Ninox* in Captain Wardlaw Ramsay's collection is *N. obscura,* a native of the Andaman Islands, which bears a curious similarity in the nearly uniform fuscous coloration of its underparts to the more southern *N. theomacha,* from which, however, it is readily distinguishable by its larger size and darker abdomen, as well as by the tail (which is only partially cross-barred in *N. theomacha*) having from four to five dark transverse bars, and also bearing a white tip.

I have taken the following measurements from Captain Wardlaw Ramsay's three specimens of *N. obscura,* which, if correctly sexed, exhibit the curious peculiarity of the male bird being longer in the wing than the two females ; I may add that one of the latter has several snow-white feathers on the nape, which bear the appearance of an accidental variation :—

	Wing.	Tarsus.	Middle toe *s. u.*
♂. South Andamans..........	8·80	1·10	1·20
♀. do.	8·40	1·10	1·20
♀. do.	8·20	1·10	1·20

I annex for comparison the measurements of four specimens of *N. theomacha* in the Norwich Museum :—

	Wing.	Tarsus.	Middle toe *s. u.*
♂. Andai, N.E. New Guinea ..	7·10	1·10	1·00
♂. Jobie Island	7·25	1·15	0·90
♀. do.	7·60	1·10	1·00
Not sexed, S.E. New Guinea ..	7·60	1·20	0·95

I may take this opportunity of mentioning another scarce Owl from Jobie Island, which has lately been acquired by the Norwich Museum, viz. *Ninox dimorpha*; this specimen, which has been marked by the collector as a female, measures—wing 8·75, tarsus 1·40, middle toe *s. u.* 1·10.

Captain Wardlaw Ramsay possesses a beautiful rufous Owl, a male, from Camorta Island in the Nicobar group, where it was obtained by Captain Wimberley on January 23, 1874, which I refer to *Scops nicobaricus*, described by Mr. Hume in 'Stray Feathers,' vol. iv. p. 283; but the plumage of the present specimen exhibits a more unbroken rufous than that described by Mr. Hume—more unbroken, indeed, than that of any other rufous Owl which I remember to have examined.

Mr. Hume speaks of the "crown and entire upper surface" being "more or less freckled and vermiculated with blackish brown, and with the feathers of the ruff on the sides of the neck and across the throat strongly marked with black."

All these black and blackish-brown markings and vermiculations are absent from the present specimen, the entire plumage of which, both above and below, is of a bright rich rufous throughout, with the following exceptions only:—The lower scapulars are partly white, as in *Scops sunia*; the outer webs of the primaries are barred with blackish brown, and those of the first four are sparsely ocellated on the external margin with fulvous white; the outer webs of the secondaries and tertials are similarly crossed with dark transverse bars, but less distinctly; the inner webs of all the wing-feathers are broadly cross-barred with black, the interspaces being blackish, mingled, especially on the tertials, with fulvescent rufous; the rectrices are cross-barred with blackish brown, the bars being most distinct on the inner webs of the lateral tail-feathers; the bastard wing is marked like the first four primaries, and the adjacent edge of the wing itself is very slightly mottled with white; there is also a slight mottling of pale fulvous and blackish brown on the under wing-coverts. I may add that the bristly feathers round the upper mandible (which are long and numerous) are whitish on their basal portion, but rufous for the remainder of their length.

The present specimen measures as under:—

	inches.
Wing	5·80
Tarsus	0·90
Middle toe *s. u.*	0·85
Ear-tuft	0·60

XVII.—*Remarks on the Occurrence of the Egyptian Nightjar in Nottinghamshire.* By J. H. Gurney, Jun.

On the 23rd of June, 1883 (as recorded in 'The Zoologist,' p. 374), an Egyptian or Isabelline Nightjar (*Caprimulgus ægyptius*) was shot near Mansfield, in Nottinghamshire, and is now in the fine British collection of Mr. Joseph Whitaker, who had it while still in the flesh. Mr. H. E. Dresser figures two forms, the pale and the dark; the difference is but slight, but it is apparently to the dark form that Mr. Whitaker's bird belongs. Mr. Dresser says the range of the Egyptian Nightjar is not very extensive, Egypt and Nubia appearing to be its true home (' Birds of Europe,' iv. p. 629). I believe I saw a good many in Egypt, but, strange to say, never shot one. From seeing them in April, evidently coming north with the migratory stream, I supposed them to be summer visitants; but as Mr. E. C. Taylor informs me of his having shot some in December 1853, and as I have lately seen an example obtained at Komombo on February 12th, 1882, by Mr. F. Worthington, it is quite evident that the species, though a true migrant, is found in Egypt at all seasons.

How far south it goes is not known, but westwards Mr. Dresser mentions (*l. c.*) that he has identified specimens from Baluchistan and Turkestan. Strange to say, it has not been met with in Palestine, where, perhaps, its place is taken by *C. asiaticus* (*C. tamaricis*, Tristr.). The European occurrences, previous to the Nottinghamshire specimen now recorded, are Herr Gätke's Heligoland example, obtained eighty ears ago, on the same day but one as the English bird, and three specimens obtained in Malta in the spring of 1876, recorded in this Journal (Ibis, 1881, p. 192) by Prof. Giglioli, who adds that another was shot in Sicily by Baron G. Caruso. Mr. Whitaker's bird makes the sixth European specimen, and adds a third species of the genus to the British list, the Red-necked Nightjar (*C. ruficollis*) having been already obtained here.

XVIII.—*Further Contributions to the Ornithology of Japan.*

By Henry Seebohm.

(Plate VI.)

Two more collections of Japanese birds, for which I am indebted to the kindness of Mr. F. Ringer of Nagasaki and Mr. H. Henson of Hakodadi, enable me to add a few species to the list of birds from these islands, and to correct some errors in the identification of those already recorded.

Phaleris psittacula.

An example obtained by Mr. Snow on the Kurile Islands is correctly identified.

Mormon corniculatus.

An example collected by Mr. Snow on the Kurile Islands is correctly identified.

Brachyrhamphus kittlitzi.

A male collected by Mr. H. Henson at Hakodadi on the 23rd of March is intermediate between no. 1269 and no. 1357 ('Ibis,' 1884, p. 30), and points to the conclusion that these four examples may be four stages, from young to adult, of one species, probably *B. kittlitzi.* I am expecting further skins from Kamtschatka, which may throw more light on the subject.

Uria columba.

An adult example (No. 2795) collected by Mr. Snow in the Kurile Islands, and an immature female (no. 1850) from

Hakodadi, are correctly identified. Mr. Henson has also sent an adult and an immature example of *U. carbo.*

BERNICLA NIGRICANS.

An example of the Black Brent Goose sent by Mr. Ringer from Nagasaki agrees with examples from Yedo Bay and Hakodadi, and has hitherto been erroneously identified as the Brent Goose (Ibis, 1878, p. 212). There are sixteen feathers in the tail. It is an almost uniform dark brown, the head, neck, and breast nearly black, except a white crescent streaked with black on the fore neck, nearly meeting on the hind neck. Examples of the Brent Goose with the very dark underparts below the breast are found in England on the Essex and Lincolnshire coasts, together with typical birds; and in some of them the white on the neck is almost as much developed as in the Black Brent Goose.

This species is said to be found on both coasts of North America, but very rarely on the east coast. It was first described by Lawrence (Ann. Lyc. Nat. Hist. N. York, iv. p. 171). The volume is dated 1848, but the paper was read on the 16th of March, 1846. This bird must not be confounded with *B. hutchinsi* from Hakodadi (Ibis, 1882, p. 369), which is paler and has the belly nearly white, and large triangular patches of white covering the cheeks and ear-coverts on each side of the head, as in *B. canadensis,* of which it is a small form, and with which it is probably conspecific. *B. leucopareia* is another form of the size of *B. canadensis,* but differing from it and *B. hutchinsi* in having a pale ring round the lower throat.

TADORNA CORNUTA.

Several examples collected by Mr. Ringer at Nagasaki are correctly identified.

QUERQUEDULA CIRCIA.

Examples of the Garganey have been sent by Mr. Ringer from Nagasaki. Capt. Blakiston has obtained it also in Yezo.

FULIGULA FERINA.

Capt. Blakiston has sent an example of the Pochard from Hakodadi.

STERCORARIUS BUFFONI.

An example (no. 2753) collected by Mr. Snow in the Kurile Islands is correctly identified.

PUFFINUS LEUCOMELAS.

A number of specimens collected by Mr. H. Henson at Hakodadi agree with the plate in the 'Fauna Japonica.'

PUFFINUS CARNEIPES.

Several examples collected by Mr. H. Henson at Hakodadi appear to belong to this species. The under surface of the wing is dark, and the legs and feet are pinkish.

DIOMEDEA NIGRIPES.

A fine adult female of this Albatross shot by Mr. H. Henson on the 17th of May in the Strait of Tsugaru, separating Yezo from the main island, adds another species to the fauna of Japan. It differs from the other dark Albatross from Japan (*D. derogata*) in being slightly smaller, in having dark instead of pale legs and bill, and in having the head much paler in colour, especially round the base of the bill. The bill is also smaller, measuring 4¼ inches from the frontal feathers instead of 5 inches. This is said to be a good species, though it has all the appearance of being the young of the nearly white Albatross (*D. albatrus*), of which I have an adult male obtained by Mr. H. Henson at Hakodadi on the 4th of April, which agrees in dimensions with a skin in the Swinhoe collection from Amoy. In Mr. Ringer's collection is also an example of *D. albatrus* from Nagasaki.

GOISACHIUS MELANOLOPHUS.

An example (No. 2714) from the main island, and a series of examples collected by Mr. Ringer at Nagasaki, belong to this species. It is not found in Yezo.

ARDEA SACRA.

Two Reef-Herons from the islands in the Straits of Corea probably belong to this species. They are an almost uniform dark slate-grey, with a narrow streak of white on the throat. They measure:—wing 12·5, 11·0; bill in front 3·6, 3·4; tarsus 3·5, 3·0; mid-toe without claw 2·6, 2·4; bare portion of tibia 1·6, 1·3. The range of this species appears to extend from the Andaman Islands eastwards to Burma, the Malay Archipelago, Japan, and the north-east coasts of Australia. Almost everywhere it seems to be accompanied by a white variety, with which it appears to interbreed, producing piebald examples. It is said, however, that in South-east Australia and in New Zealand the slate-grey form alone occurs. Both forms, however, are recorded from some of the Pacific islands. From Ceylon eastwards as far as West Africa a very nearly allied species, *A. gularis*, is found in both the slate-grey and white forms. It is said to differ in having the chin, throat, and sides of the head white, and in being a somewhat larger bird; but ornithologists are not agreed on the specific distinctions between these species. Examples of the slate-grey form of the eastern species collected by Siebold in Japan are recorded by Schlegel (Mus. Pays-Bas, Ardeæ, p. 27), but no mention is made of them in the 'Fauna Japonica.'

GRUS CINEREA.

Of the six Cranes which breed in Eastern Siberia five are recorded from Japan. Of these, only four appear in Temminck and Schlegel's 'Fauna Japonica,' the Sacred or Mantchurian Crane being omitted, no doubt for the very good reason that the Japanese would not allow Siebold or his collectors to procure one. The Common Crane is a winter visitor to Japan, but many only pass on migration, wintering still further south.

GRUS LEUCOGERANUS.

The same remarks apply to the Asiatic White Crane.

GRUS LEUCAUCHEN.

Grus antigone, Linn. apud Pallas.
Grus vipio, Pall. apud David and Oustalet.
Grus antigone ?, Linn. apud Blakiston and Pryer.

The White-naped Crane is the most abundant Crane in Japan. Mr. Ringer has sent two skins from Nagasaki.

GRUS MONACHUS.

The White-headed Crane, according to l'Abbé David, breeds in Japan. Mr. Ringer has sent three skins collected in Nagasaki.

GRUS VIRIDIROSTRIS.

Grus japonensis, Briss.

Grus leucauchen, Temm. apud Blakiston and Pryer.

This is the Sacred Crane of the Japanese. It is probably only a winter visitor to Japan, and the account of its habits in that island, quoted in the 'Natural History of the Cranes' by Tegetmeier from Sir Rutherford Alcock, refer to this species, though they are erroneously ascribed to the White-naped Crane by Tegetmeier, who has further complicated the subject by including the name *Grus antigone*, Linn. apud Pallas, in the synonymy of both the White-naped and Sarus Cranes; and that of *Grus japonensis*, Briss., in the synonymy both of the White-naped and Mantchurian Cranes. Mr. Ringer has sent an example of the Mantchurian Crane from Nagasaki.

RHYNCHÆA BENGALENSIS.

A male collected by Mr. H. Henson at Hakodadi on the 22nd of May is the first example of this species obtained in Yezo.

GALLICREX CRISTATA.

An example of this species collected by Mr. Ringer at Nagasaki is an addition to the Japanese fauna.

GALLINULA CHLOROPUS.

An example (No. 3249) from Yokohama agrees with European specimens.

FULICA ATRA.

An example (No. 3248) from Yokohama, and an example collected by Mr. H. Henson at Hakodadi, agree with European specimens.

OTIS DYBOWSKII.

An example of a male Bustard collected by Mr. Ringer at Nagasaki agrees with Taczanowsky's description of the eastern form of the Great Bustard. It is somewhat smaller than the western bird, the bill is slightly longer and more slender, the head is paler in colour, and the lesser wing-coverts are grey, like the greater and median wing-coverts, instead of being mottled with brownish buff and black, like the back. Dybowsky states that he has obtained both adult and young from Dauria; and what seem to be young males of the western form in the Cambridge Museum have the lesser wing-coverts coloured as in the adult, so that it would appear that the species is distinct.

LAGOPUS RUPESTRIS?

A specimen of a Ptarmigan was shot by Mr. Snow on the nearest of the Kurile Islands to Kamtschatka, which is probably the Rock-Ptarmigan. It is pure white, except the tail-feathers and the lores, which are black.

COLUMBA LIVIA.

An example from Nagasaki is darker than usual. The Rock-Doves of Japan may be escaped birds which have taken possession of the caves on the coast; they occupy all the temples in Japan, and are fed by the devotees of Buddha.

TURTUR HUMILIS.

An example sent by Mr. Owston was obtained from a dealer at Yokohama, and was said to have been shot in the neighbourhood.

CARPOPHAGA IANTHINA.

A fine example collected by Mr. Pryer near Yokohama agrees with the figure in the 'Fauna Japonica.' Two examples collected by Mr. Ringer in Nagasaki are now in the British Museum.

IYNGIPICUS SEEBOHMI, Hargitt, Ibis, 1884, p. 100.

Mr. Oldfield Thomas has kindly compared examples of *I. kisuki* and this species with the types of the former in the Leyden Museum, and assures me that Temminck and Schlegel's bird is unquestionably the same as examples collected by Mr. Ringer near Nagasaki on the island of Kiushiu.

IYNX TORQUILLA.

An example of this species (No. 1242), a male dated Hakodadi, May, was identified by Swinhoe (Ibis, 1874, p. 162) as *Iynx japonica.* A careful comparison of this skin and a series of skins from South China with European examples fails to show any differences either of colour or size which are not common to eastern as well as western birds. This species does not appear to present any climatic variations.

CHELIDON DASYPUS.

The type of this species from Borneo in the Leyden Museum has been compared with the type of *C. blakistoni* from Japan by Mr. Sharpe, who pronounces them to be identical. Bonaparte's name will probably be the one adopted by ornithologists.

CORVUS NEGLECTUS.

An example in the collection of Captain Blakiston (No. 2701), obtained at Osaka, in the southern portion of the main island of Japan, appears to belong to an intermediate form between *Corvus dauricus* and *C. neglectus.*

XANTHOPYGIA CYANOMELÆNA.

Capt. Blakiston has pointed out to me a most unaccountable blunder in the British Museum Catalogue of Birds (iv. p. 251), with reference to the female of this species. Four examples collected by Mr. H. Henson near Hakodadi, and a fifth example from Canton in the Swinhoe collection, agree with the plate and description of *Muscicapa gularis* of the 'Fauna Japonica,' a name which Mr. Sharpe includes in the synonymy of *X. cyanomelæna,* admitting it to be the female of that species. Nevertheless in the description a young male is erroneously described as the female. The latter differs in having no trace of blue on any part of the plumage, and no white on the base of the tail-feathers. The pale tips to the greater wing-coverts and innermost secondaries betray the immature birds at a glance. It appears to me that the plumage described by Mr. Sharpe as belonging to the adult female is that of the young male in first plumage, of which I have seen no skins dated later than October. Spring examples of males of the year only differ from adults in having the pale tips to the greater wing-coverts and innermost secondaries. The greenish-blue and purplish-blue foreheads and crowns are found in both adults and males of the year.

MOTACILLA BLAKISTONI.
MOTACILLA AMURENSIS.

Capt. Blakiston now regards these two forms as adult and young of one species, and I feel very much inclined to agree with him. The fact that the geographical distribution of the two forms, so far as it is known, coincides, is of itself strong presumptive evidence that both belong to one species. On this hypothesis *M. amurensis* can only be the bird of the year of *M. blakistoni.* One must lay the blame of having committed the blunder of separating them upon somebody; and we propose to ascribe it to the complete ignorance of, and apparent indifference to, the facts connected with the moulting of birds displayed by all English ornithologists. Wagtails appear to have a complete moult, which includes their wing and tail-feathers, in their first autumn. *M. japonica* moults at once into its adult plumage. *M. amurensis* appears to have an intermediate stage between the young in first plumage and the adult after the second autumn moult. In the adult plumage I have described the bird as *M. blakistoni.* In spring a partial moult takes place: all the small feathers of the bird of the year are moulted into the summer plumage of the adult, but the wing- and tail-feathers are not changed. In this stage I have described the bird as *M. amurensis* in adult spring plumage. This hypothesis leaves, however, two difficulties, which may be explained as follows:—The amount of white on the wing of birds of the year must vary so much that what I have taken to be birds of the year of *M. blakistoni* are really only birds of the year in which the plumage is more adult than usual. We must also assume that the amount of black on the head varies to a still greater extent, so that the birds with black heads which I have regarded as adult male *M. amurensis* in winter plumage after the second moult are really birds of the year which have only moulted once, but for some cause or other have the black on the head almost as pronounced as in the adult. This variation in the plumage of birds of the year, especially in those which have two broods, is by no means a new fact in ornithology. Probably the young of the first broods moult in autumn into a plumage more nearly approaching that of the adult bird than that assumed by the young of the second broods. This conclusion is confirmed by a male in my collection obtained by Mr. Whitely at Hakodadi, on the 17th of April, which is in the adult spring plumage of *M. amurensis*, except the first primary of the right wing, which is in the adult plumage of *M. blakistoni*. This might be accounted for on the supposition that the first primary had been injured during the winter, and had been replaced at the spring moult by a feather of the adult plumage.

ERITHACUS CYANEUS.

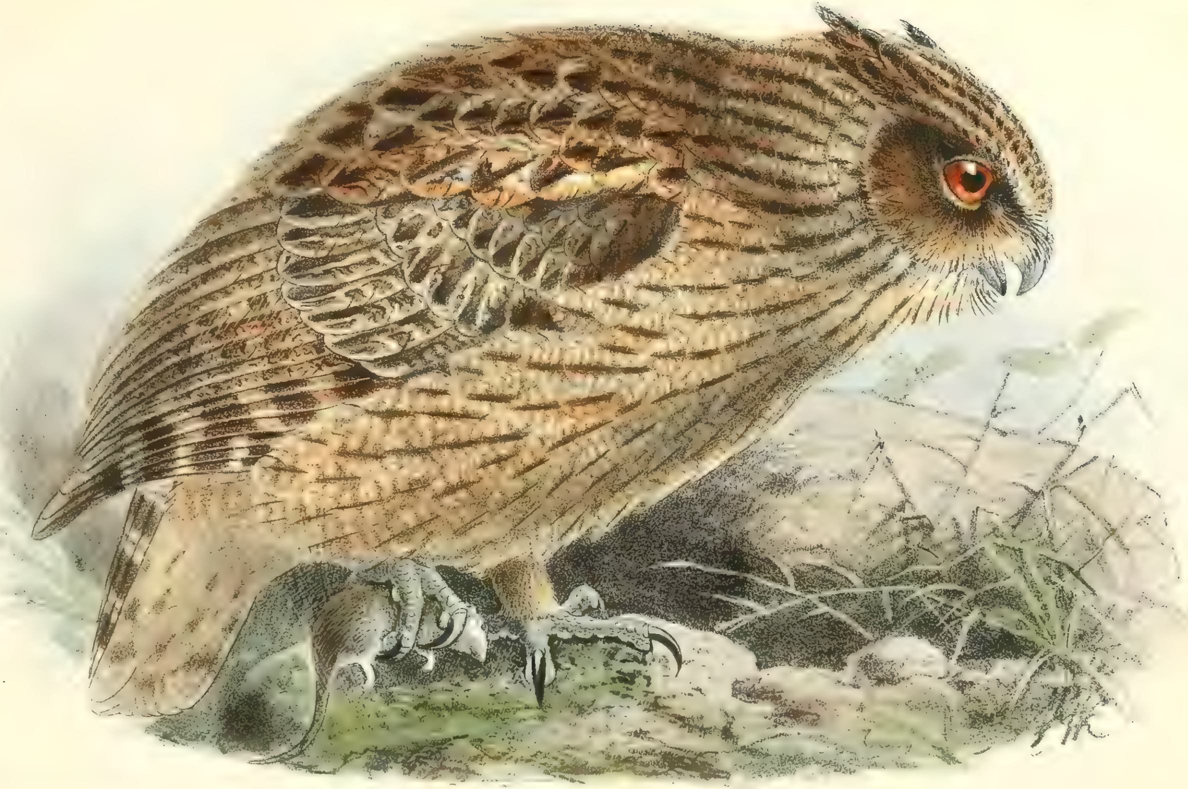
An example (No. 1267) from Hakodadi is an adult male of this species collected in May. A skin (No. 3225) collected by Mr. Jouy in the middle of the main island in August has scarcely moulted its first plumage, and shows traces of dark terminal bars on the feathers of the throat and breast, which are suffused with buff. The greater wing-coverts have chestnut tips.

ERITHACUS CALLIOPE.

Several skins of this species have been sent by Capt. Blakiston from Yezo.

EMBERIZA SPODOCEPHALA.

This species, which is very common in China, was first recorded from Japan in 'The Chrysanthemum' for April 1883, by Capt. Blakiston, from a specimen collected near Tokio in January by Mr. P. L. Jouy, and now in the Smithsonian Museum. I have examined this skin and find it to be an adult male with slate-grey throat and breast. The adult male of the nearly allied Japanese species, *E. personata*, is easily distinguished by the clear yellow of the underparts



J. G. Keulemans del.

BUBO BLAKISTONI.

Hanhart imp.

below the chin. Females and immature males are sometimes difficult to distinguish, but in *E. personata* the underparts are generally a much brighter yellow. The latter species has not been found in China.

STRIX RUFESCENS.

Three examples from Nagasaki of this variety of *S. uralensis* are so dark and rufous as to appear specifically distinct. The lighter bars across the first primary and the two centre tail-feathers are almost obsolete. This form probably replaces *S. uralensis* in the main and south islands of Japan.

BUBO BLAKISTONI, Seebohm, *anteà*, p. 42. (Plate VI.)

An immature example of an Owl obtained in the neighbourhood of Shanghai by Mons. Heude is in the museum of the Jardin des Plantes at Paris. It was determined by Mr. Sharpe (Ibis, 1875, p. 255) as *Bubo coromandus*, and adult examples since received from the valley of the Yang-tse-kiang have confirmed his decision. It had been described as *Bubo sinensis* (Heude, Ann. Sc. Nat. Paris, sér. 5, xx. article 2), a name apparently taken from Daudin (Traité d'Orn. ii. p. 209), who appears to have founded it upon an Eagle-Owl from China, which Manduyt (Encycl. Méth. Orn. ii. p. 73) says differs from our bird, but does not state in what respect. This bird is perfectly distinct from the Japan Eagle-Owl, *Bubo blakistoni*, of which a figure (Plate VI.) is now given.

PANDION HALIAETUS.

Two examples of this bird, one a female from Hakodadi (No. 2061) obtained in October, and the other obtained by Mr. Ringer at Nagasaki, agree in size with the typical form, and measure 19½ and 19 inches in length of wing.

AQUILA PELAGICA.

A fine example, not quite adult, of this magnificent Eagle from the eastern part of Yezo shows the enormous development of bill in this species, the height of the bill being greater than that of the skull. It also confirms the interesting fact, pointed out by Baird, Brewer, and Ridgway, that this species has fourteen tail-feathers.

XIX.—*On the East-Asiatic Shore-Lark* (Otocorys longirostris). By Henry Seebohm.

Otocoris longirostris, Gould, fide Moore, Proc. Zool. Soc. 1855, p. 215 (India).

Otocorys penicillata, Gould, apud Swinhoe, Proc. Zool. Soc. 1862, p. 318 (China).

Otocorys alpestris, Linn. apud Swinhoe, Proc. Zool. Soc. 1863, p. 272 (China).

Otocoris albigula, Brandt, apud Dybowski, Journ. Orn. 1868, p. 334 (Dauria).

Otocorys sibirica, Eversmann, fide Swinhoe, Proc. Zool. Soc. 1871, p. 390 (China).

Otocoris elwesii, Blanford, Journ. As. Soc. Beng. 1872, p. 62 (Himalayas).

Otocorys alpestris, Linn. apud Dresser, B. Eur. iv. p. 392 (1874) (China).

Otocorys penicillata, Gould, apud Dresser, B. Eur. iv. p. 397 (1874) (India).

Otocorys brandti, Dresser, B. Eur. iv. p. 401 (1874) (Kirghis steppes).

Otocorys parvexi, Taczan. Bull. Soc. Zool. France, 1876, p. 161 (Dauria).

Otocoris nigrifrons, Prjevalski, Mongolia and Thibet, ii. p. 103 (1876) (Mongolia).

Otocorys sibirica, Swinh., David & Oust. Ois. de la Chine, p. 316 (1876) (China).

Habitat. A resident in Turkestan, the Himalayas, the Altai Mountains, Dauria, and Mongolia, occasionally wandering in winter into North China*, North India, and South-east Russia.

The evolution of order out of chaos has the same charms for the ornithologist that the putting together of a puzzle has for a schoolboy. As an example of chaos let us take the portions of the articles on the Shore-Larks in Dresser's 'Birds of Europe' referring to the species the name of which heads the present article. To this the same author has added an appropriate climax in his letter on the subject (Ibis, 1884, p. 116). As an example of order, I venture to refer to the synonymy and geographical distribution copied at the head of this article from my 'History of British Birds,' ii. p. 286*. I must do Mr. Dresser the justice to say that in the letter already mentioned he admits his error (long ago pointed out by Blanford and Scully) in uniting *O. longirostris* with *O. penicillata*; but in doing so he appears to imply that the rest of his work was free from important blunders, and does not deserve the mild censure which I applied to it. He has apparently forgotten that in the 'Birds of Europe' (iv. p. 396) he says that *O. penicillata* "extends eastwards into North China," and contradicts himself on page 397, where he says that an example in the Swinhoe collection from Tientsin is a long-billed form of *O. brandti,* a statement which is quite correct. But on page 392 he had referred the very same skin to *O. alpestris.* Which of the three species does he really think it belongs to? His treatment of *O. elwesi* is equally capricious. On page 395 he identifies it with *O. penicillata*; but on page 401 he refers it to *O. alpestris.* Unfortunately both these identifications are wrong. *O. elwesi* is unquestionably a somewhat small form of *O. longirostris.* Of his blunder respecting the latter species little need be said, as he has recanted it; but his statement on page 401 that the series of Shore-Larks in the Gould collection from Kulu (one of which is the type of *O. longirostris*) all show the black on the breast united with that on the neck is utterly inexplicable. The fact is that not one of them does so, as any one may now see in the British-Museum collection; neither does the example depicted in the P. Z. S. by no less an artist than Wolf. We now come to the most "egregious blunder" of all. On page 397 Dresser comes to the conclusion that the pale southern ally of *O. alpestris* with the white throat has not got a name, and proposes for it that of *O. brandti.* On page 398 he gives its geographical distribution as "probably restricted to the steppes of Southern Russia." Nevertheless it is a most remarkable fact that Dresser's 'Birds of Europe' does not contain an article on a bird named by Dresser himself and supposed by him to be confined to Europe. As a matter of fact, the type appears to be a Sarepta skin, and there is also a skin from Astrakan in the British Museum; but the latter has only recently been added to the national collection*.

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* A specimen in Canon Tristram's possession, said to be from Pekin, and once in the Swinhoe collection, is a winter example (shot 12th Dec. 1863) of *O. alpestris.* David and Oustalet give the range of the two species very correctly.

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* I have added to the synonymy the catalogue of Swinhoe's and Dresser's blunders, which I purposely omitted in my book, not wishing to call special attention to their number and importance.

I doubt if a more puzzling bit of ornithological chaos than this could be found anywhere. It took me a week's hard work to unravel it; but by a careful measurement and comparison of all the skins in my own collection and in that of the British Museum, I came to the conclusion that *O. longirostris* was a pale subtropical ally or representative of *O. alpestris,* which ranges across Central Asia from the basin of the Caspian to Mongolia, extending northwards through the Altai Mountains to Dauria, and southwards into the Himalayas. *O. alpestris* is a bird of the tundra, whilst *O. longirostris* is a bird of the steppes, and breeds from one to two thousand miles south of its arctic ally. The differences in size in the latter species at first puzzled me, but by comparing measurements of skins from different localities I came to the conclusion, to which I still adhere, that *O. brandti* and *O. longirostris* cannot be separated; they are, in fact, united by *O. elwesi* †, as Dresser might possibly have observed if he had taken the trouble to examine the material which has "come to light" since he wrote his articles in the 'Birds of Europe.' It seems to me that when the facts respecting them are known, no "unbiassed ornithologist" can doubt that these three forms all belong to one species. All three forms occur both in Turkestan and in the Himalayas, and are connected together by a series of intermediate forms, so that the division into two or three is a perfectly arbitrary one. I have only been able to get the measurements of three Mongolian skins; but as one of these is of the small form, one somewhat larger, and the third of the large form, there cannot be much doubt that the variation in Mongolian forms is the same. Precisely the same variation of size, both of wings and bill, occurs in *O. penicillata,* so that if there are two or three species of Eastern Asiatic Shore-Larks, there must also be the same of Western Asiatic Shore-Larks. The amount of black at the base of the upper mandible varies also irrespective of locality, and the variation is also found to nearly the same extent in *O. penicillata.* The width of the white band which separates the black of the neck from the black of the breast seems to depend entirely on the make up of the skin. If the neck is stretched it looks broad, but if it is made up short it of course looks narrow. Winter skins show more white on the neck and forehead, because at that season many of the black feathers have pale tips, which are cast in spring. None of the characters pointed out appear to me to be of the slightest specific, or even subspecific, value, because they are not confined to birds from any one locality, nor are they confined to one species only, but appear to be individual variations common to the genus. Dresser appears to be shocked at a difference of ·8 inch in the length of wing in one species, though he admits a similar difference in his skins of *O. penicillata,* and both he and I agree to a variation of a whole inch in the length of wing of the Common Sky-Lark. Difference of size, where it is coexistent with difference of geographical distribution, may warrant subspecific distinction; but where nature has not drawn a geographical distinction most ornithologists are content to allow difference of size to be regarded as an individual peculiarity.

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* Finsch, in his account of the Shore-Larks found by him in South-west Siberia, states positively that the black on the breast joins that on the cheeks; but in two examples from his collection, now in the British Museum, this is not the case. He probably got both species, as Severtzow also obtained both in North-west Turkestan.

† Severtzow at first separated *O. brandti* of North-west Turkestan from *O. longirostris* of East Turkestan (Ibis, 1876, p. 181); but later he apparently united them, for in his "Birds of the Pamir" (Ibis, 1883, p. 61) he speaks only of *O. elwesi,* adding that "in the Pamir a subspecies with a rather long beak predominates, but this difference is neither considerable nor constant."

The Common or Arctic Shore-Lark is a circumpolar bird, being found on the arctic prairies of America, as well as on the fjelds of Lapland and the tundra of Siberia. Two other species or subspecies of Shore-Larks occur in the American continent; but I have not been able to see a large enough series to speak positively concerning them. So far as I am able to judge, Dresser's treatment of the American Shore-Larks is quite as careless as his work on the Asiatic species of this group. He represents *O. alpestris* as breeding throughout North America, the only other American species in his opinion being *O. peregrina* from Bogota. Both these statements appear to me to be entirely wrong, and contrary to the evidence so carefully collected by Messrs. Baird, Brewer, and Ridgway. It appears to me that, in addition to *O. alpestris,* which breeds in the arctic regions of both continents, probably never below the limits of forest-growth, there is on the American continent a southern form, *O. occidentalis,* breeding on the plains of the upper valley of the Mississippi and the valley of the Missouri, which, like *O. longirostris,* has the throat white instead of yellow. The alleged intermediate forms between it and its southern ally I imagine to be either birds of the year of the southern species or faded summer examples of the northern species. In what respect *O. occidentalis* differs from *O. longirostris* I am unable to say. The third American species is *O. chrysolæma* (of which *O. peregrina* is doubtless a synonym). This bird is a tropical form of *O. alpestris,* and is a resident in Mexico and some of the adjoining United States, its range extending southwards into the extreme north-west of South America. It is said to differ from its arctic ally in being smaller and richer in colour, the yellow on the throat being even more brilliant than in the arctic species.

XX.—*Notes on Woodpeckers.*—No. VI. *On the Genus* Miglyptes. By Edward Hargitt, F.Z.S.

Although only four species of this genus are known, confined to the Indo-Malayan subregion and the Burmese countries, there has been great confusion in their synonymy, and I have endeavoured in the present paper to show the characters of all these four species and to disentangle their somewhat complicated literature. The material upon which this paper is based is contained in the collections of the British and Leyden Museums, as well as in my own collection and that of Captain Wardlaw Ramsay.

Key to the Species.

a. Mantle and upper back barred.	
a′. Lower back and rump creamy white.	
a″. Centre of breast and abdomen uniform black .	*tristis.*
b″. Breast and abdomen with fulvous cross bars . .	*grammithorax.*
b′. Lower back and rump barred like the mantle . .	*tukki.*
b. Mantle and upper back uniform black; rump creamy white; breast and abdomen uniform black	*jugularis.*

1. Miglyptes tristis.

Picus tristis, Horsf. Trans. Linn. Soc. xiii. p. 177 (1822); Giebel (pt.), Thes. Orn. p. 183 (1876).

Picus poicilolophus, Temm. Pl. Col. iv. pl. cxcvii. fig. 1 (1823); Wagler (pt.), Syst. Av. sp. 68 (1827); Cuvier, Règn. Anim. 1829, p. 451.

Meiglyptes poicilophus, Swains. Classif. B. ii. p. 309 (1837).

Meiglyptes tristis, Gray, List Gen. 1840, p. 55; id. Gen. B. ii. p. 447 (1846); Blyth (pt.), Cat. B. Mus. As. Soc. 1849, p. 60; Bp. (pt.) Consp. Gen. Av. i. p. 112 (1850); id. Consp. Volucr. Zygod. p. 9 (1854); Reichenb. (pt.) Handb. Scans. Picinæ, p. 402, pls. dclvii. figs. 4370, 4371 (1854); Horsf. & Moore (pt.), Cat. B. Mus. E.I. Co. ii. p. 668 (1856–58); Gray, List Picid. Brit. Mus. p. 123 (1868); id. Hand-l. B. ii. p. 203. no. 8838 (1870); Nicholson, Ibis, 1879, p. 164; id. op. cit. 1881, p. 141.

Phaiopicos tristis, Mahl. N. Classif. Mém. Acad. Metz, 1848–49, p. 338.

Phaiopicus tristis, Malh. Monogr. Picid. ii. p. 10, pl. xlviii. figs. 1, 2 (1862).

Picus tristis, var. *a,* Sundev. Consp. Av. Picin. p. 91 (1866).

Miglyptes tristis, Hume, Str. F. 1879, p. 497 (note).

Adult male. Upper and middle back, scapulars, and wing-coverts black, narrowly barred with buffy white; bastard-wing and primary-coverts black, spotted with buffy white; quills black, spotted with buffy white upon both webs, the innermost being barred with the same across both webs; shafts black; lower back and rump buffy white, the former with a few dusky cross-markings; upper tail-coverts black, narrowly barred with buffy white; tail black, with buffy white spots upon both webs; shafts black; lores, entire head and crest, sides of the neck, chin, and throat black, finely vermiculated with buffy white; a small red malar patch; under surface of the body black, the sides of the body, flanks, and thighs barred with buffy white; under tail-coverts black, narrowly barred with buffy white; under wing-coverts and axillaries buffy white. Total length 6 inches, culmen 0·85, wing 3·7, tail 1·95, tarsus 0·7; toes (without claws)—outer anterior 0·6, outer posterior 0·55, inner anterior 0·4, inner posterior 0·28.

Adult female. Resembling the adult male, but wanting the red malar patch. Total length 5·8 inches, culmen 0·75, wing 3·6, tail 1·7, tarsus 0·65.

This species (the types of which, procured by Horsfield, are in the British Museum) is confined exclusively to the island of Java, whence specimens have been forwarded by Messrs. E. C. Buxton and H. O. Forbes. It is apparently a rare bird, or, perhaps, one difficult to obtain, as but few examples are to be found in museums. It may at once be distinguished from *M. grammithorax* of Malherbe, with which it has often been confounded, by its uniform black breast and abdomen. When Lord Walden published his paper "On a Collection of Birds from Northern Borneo"

('Ibis,' 1872), it appears to me that he had not seen the true *M. tristis* of Horsfield from Java, and that he considered the dark-breasted birds received by him from Simunjon and Banjermassing to be referable to that species. Lord Walden was certainly right in regarding these specimens as immature; but the slightly darker underparts exhibited in the immature of *M. grammithorax* are totally distinct from the entirely black breast and abdomen possessed by the Javan bird. Mr. F. Nicholson ('Ibis,' 1879, p. 164) has, in my opinion, clearly shown that *M. tristis*, from Java, and *M. grammithorax*, inhabiting Southern Tenasserim, the Malayan peninsula, Sumatra, and Borneo, are both good and valid species. My descriptions are taken from a pair of birds in the Leyden Museum.

2. MIGLYPTES GRAMMITHORAX.

Picus poicilolophus (non Temm.), Less. Traité, p. 221 (1831).

Hemicircus tristis, Eyton, P. Z. S. 1839, p. 106.

Meiglyptes tristis (pt.), Blyth, Cat. B. Mus. As. Soc. p. 60 (1849); Bp. Consp. Gen. Av. i. p. 112 (1850); id. Consp. Volucr. Zygod. p. 9 (1854); Reichenb. Handb. Scans. Picinæ, p. 402, pls. dclvii. figs. 4370, 4371 (1854).

Meiglyptes tristis (non Horsf.), Wald. Ibis, 1872, p. 365; Salvad. Ucc. Born. p. 56 (1874); Hume, Str. F. 1874, p. 471; id. op. cit. 1875, p. 324; Blyth & Wald. B. Burm. p. 77 (1875); Sharpe, P. Z. S. 1875, p. 103; id. Ibis, 1876, p. 36; Tweedd. op. cit. 1877, p. 290; Brügg. Abhandl. nat. Ver. Bremen, v. p. 455 (1877); Hume & Davison, Str. F. 1878, vi. pp. 131 and 501; Hume, op. cit. 1879, p. 52; Sharpe, Ibis, 1879, p. 243; Salvad. Ann. Mus. Civ. Genov. xiv. p. 184 (1879); Kelham, Ibis, 1881, p. 388; Sharpe, P. Z. S. 1881, p. 792; Nicholson, Ibis, 1882, p. 55; Salvin, Cat. Strickl. Coll. p. 402 (1882); Müller, Orn. Salanga, p. 72 (1882).

Phaiopicus grammithorax, Mahl. Monogr. Picid. ii. p. 12, pl. xlviii. figs. 4, 5 (1862).

Picus tristis, var. *b*, Sundev. Consp. Av. Picin. p. 92 (1866).

Meiglyptes grammithorax, Gray, List Picid. Brit. Mus. p. 124 (1868); id. Hand-l. B. ii. p. 203. no. 8839 (1870); Oates, B. Brit. Burm. ii. p. 59 (1883).

Miglyptes tristis (non Horsf.), Hume, Str. F. 1879, p. 87.

Miglyptes grammithorax, Hume, Str. F. 1879, p. 497 (note).

Adult male. Mantle and scapulars black, narrowly barred with buffy white; wing-coverts black, barred and spotted with buffy white, these markings having an irregular and broken appearance; bastard-wing black, spotted with white; edge of wing buffy white; primary-coverts black; quills black, spotted upon both webs with buffy white, the innermost barred across both webs with the same; shafts black; lower back and rump buffy white; upper tail-coverts black, narrowly barred with buffy white; tail-feathers black, spotted with buffy white upon both webs, the dwarf one having the tip white and the spots almost forming a bar; shafts black; lores, space round the eye, and chin buff; entire head, neck, and chest finely vermiculated with black and buffy white (on the face more of a buff), these markings being very fine upon the face and throat, becoming broader lower down, the whole presenting a grey appearance; a dull red malar patch; underparts more broadly barred with black and buffy white than the chest; a uniform stripe of dusky brown running down the middle of the abdomen; under tail-coverts resembling the under surface of the body, but the black markings more crescent-shaped; under wing-coverts and axillaries uniform buffy white. Total length 6 inches, culmen 0·75, wing 3·55, tail 1·75, tarsus 0·7; toes (without claws)—outer anterior 0·52, outer posterior 0·55, inner anterior 0·35, inner posterior 0·22.

Adult female. Differs from the adult male in the absence of the red malar patch. Total length 5·8 inches, culmen 0·75, wing 3·47, tail 1·65, tarsus 0·7. Mr. Davison gives the soft parts as follows:—"Legs and feet dirty, dingy, or glaucous green; claws plumbeous; bill black; edge of eyelids black; irides in about half the specimens of each sex deep brown, in the other half dull red."

Immature male. Differing from the adult in having the black portions of the plumage less intense, and the light portions buff or pale brown; malar patch dull red; the stripe down the middle of the abdomen dusky brown. (Mount Ophir, Malacca: August 14th.)

Immature female. Resembling the immature male, but wanting the red malar patch. (Mount Ophir, Malacca: August 14th.)

The descriptions of the immature birds are taken from specimens in the collection of Capt. Wardlaw Ramsay. The female in the brown or young stage is assuming the adult grey plumage, by moult, the change commencing on the head. The soft parts are given as follows:—"Iris dark lake, bill black, legs greenish" (*R. G. W. R.*). The male, shot by the same naturalist on the same date, is still in the brown stage; the soft parts are given as follows:—"Iris dark brown, bill black, legs greenish" (*R. G. W. R.*).

Malherbe was the first author to recognize the distinctness of this species from *M. tristis* of Java; and it is surprising to find that since the publication of Malherbe's description of *M. grammithorax* so many naturalists should have persisted in calling the Malaccan bird *M. tristis*. This can only be accounted for by the rarity of *M. tristis* for comparison. Malherbe's species may easily be distinguished from the Javan bird by its fulvous-barred underparts. Mr. Davison obtained it in the southern portion of Tenasserim, and the Hume collection contains specimens from Hankachin and Bankasoon: it is found throughout the Malayan peninsula; also in the island of Salanga (*Müller*); and Messrs. Wallace and H. O. Forbes procured examples in Sumatra; it likewise forms part of most collections sent from Borneo, where it would appear to be tolerably plentiful.

3. MIGLYPTES TUKKI.

Picus tukki, Less. Rev. Zool. 1839, p. 167.
Hemicercus brunneus, Eyton, P. Z. S. 1839, p. 106.
Picus luridus, Nitzsch, Pteryl. p. 137 (1840).
Meiglyptes brunneus, Hartl. Syst. Verz. Mus. Hamb.

p. 93 (1844); Gray, Gen. B. ii. p. 447 (1846); Bonap. Consp. Gen. Av. i. p. 113 (1850); Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 668. no. 976 (1856–58); Sclat. P. Z. S. 1863, p. 210; Gray, List Picid. Brit. Mus. p. 125 (1868); id. Hand-l. B. ii. p. 203. no. 8842 (1870); Salvin, Cat. Strickl. Coll. p. 402 (1882).

Meiglyptes fuscus, Peale, U.S. Expl. Exped. viii. p. 131, pl. xxxvi. fig. 1 (1848).

Phaiopicos pectoralis (non Latham), Malh. N. Classif. Mém. Acad. Metz, 1848–49, p. 338.

Meiglyptes pectoralis (non Lath.), Blyth, Cat. B. Mus. As. Soc. p. 60 (1849); Bp. Consp. Volucr. Zygod. p. 9 (1854); Reichenb. Handb. Scans. Picinæ, p. 402. sp. 938, pl. dclvii. fig. 4372 (1854).

Phaiopicus pectoralis (non Lath.), Malh. Monogr. Picid. ii. p. 8, pl. xlvii. figs. 5, 6 (1862).

Picus brunneus, Sundev. Consp. Av. Picin. p. 91 (1866).

Meiglyptes marginatus, Reinw. MS. (1821); Stoliczka, J. A. S. B. xxxix. p. 277 (1870).

Meiglyptes tukki, Salvad. Ucc. Born. p. 57 (1874); Sharpe, P. Z. S. 1875, p. 103; Hume, Str. F. 1875, p. 319; Sharpe, Ibis, 1876, p. 36; Tweedd. op. cit. 1877, p. 290; Hume & Davison, Str. F. 1878, p. 132; Hume, op. cit. 1879, p. 52; Sharpe, Ibis, 1879, p. 243; id. P. Z. S. 1881, p. 792; Nicholson, Ibis, 1882, p. 55; Oates, B. Brit. Burm. ii. p. 61 (1883).

Picus tukki, Giebel, Thes. Orn. p. 183 (1876).

Meiglyptes tucci, Brügg. Abhandl. nat. Ver. Bremen, v. p. 455 (1877).

Miglyptes tukki, Hume, Str. F. 1879, p. 87.

Adult male. Back, scapulars, rump, and upper tail-coverts olive-dusky, with narrow vermicular transverse markings of dirty white and a subterminal blackish band to the feathers; wing-coverts like the back, except those of the lesser series extending along the forearm, these being uniform; bastard-wing and primary-coverts olive-dusky; edge of wing varied with whitish; quills dusky, the outer webs slightly olive and notched with buffy white, the inner webs notched with pure white; some of the inner quills narrowly barred with dingy buffy white across both webs; shafts brown; tail dusky, the feathers narrowly notched or partially barred on both webs with dirty white, the dwarf feather being tipped with the same; shafts brown, black at the tip; entire head and upper part of the side of the neck dusky olive, slightly darker on the crown, and inclining to black on the hind neck; a broad red cheek-patch, from the end of which is a stripe of clear buffy white covering the lower side of the neck and extending as far as the chest; chin and throat dirty yellowish white, narrowly barred with black; fore neck, chest, and breast black, the feathers of the latter very narrowly barred at the tip with dull buffy white; flanks, thighs, and under tail-coverts olive-dusky, with a brownish tinge, barred with dingy buffy white; abdomen uniform dusky olive-brown; under wing-coverts and axillaries buffy white, the former slightly spotted with blackish, the latter having dusky bars. Total length 7·3 inches, culmen 1·05, wing 3·95, tail 2·4, tarsus 0·78; toes (without claws)—outer anterior 0·6, outer posterior 0·6, inner anterior 0·4, inner posterior 0·27.

Immature male. Resembling the adult male, but rather lighter in colour, the forehead and crown more dusky brown, the feathers tipped with dull red, and having a subterminal blackish band, the red brighter on the forehead; occiput dusky brown; malar stripe of a paler and duller red; side of the head more of a dull buffy brown; the light patch on the side of the neck buff; the light barring on the chin and throat dingy buff; fore neck, chest, and upper breast browner, the two latter barred with dingy buff or pale brown; underparts, including the abdomen, also browner, and the barring of the whole similar in colour to that on the chest and breast; under wing-coverts uniform pale buff; the spots or partial bars on the quills and rectrices larger and broader.

Nestling male. Differing from the older but still immature male in having the red confined to the forehead, and not spreading over the crown, the latter, as well as the occiput, being uniform olive-dusky as in the adult; side of the head of the same colour as the crown; malar stripe red; wing-coverts along the forearm tipped with greyish; under wing-coverts uniform buffy white.

Adult female. Resembling the male, but wanting the red malar patch. "Iris brown; legs and feet dull dirty green; lower mandible pale plumbeous olive; upper mandible black; claws pale horny brown." (*Wm. Davison.*) Total length 7·3 inches, culmen 0·95, wing 4·0, tail 2·5, tarsus 0·82.

Immature female. Differs from the immature male in the absence of the red malar patch, and also in having no red on the forehead and crown; the light barring on the chin and throat whiter; distinguishable from the adult female in being generally lighter in colour, also in having the chest and upper breast less black and the abdomen indistinctly barred.

Nestling female. In general markings resembling the adult, but altogether more dusky in colour; forehead and crown grey tinged with green; chin and throat barred with greyish white, as are likewise the breast, flanks, and thighs; the stripe on the side of the neck white, with a yellow tinge; chest black; abdomen nearly uniform; the central pair of tail-feathers not full-grown, being about one inch in length, and uniform in colour, as are also the next two feathers on either side; dwarf feather barred with whitish; the penultimate and next inner feather with whitish spots upon both webs. The soft parts in this species are as follows:—"Legs and feet dull or brownish green; claws a little paler; irides brown; upper mandible black; lower mandible pale plumbeous blue, in some greenish, in many the tip is dark plumbeous, and the base is also, at times, a darker plumbeous." (*W. Davison.*)

I share the views expressed by the (then) Lord Walden ('Ibis,' 1871, p. 165), and do not consider that Latham's description of *Picus pectoralis* agrees with the present species, which will therefore have to bear the title of *M. tukki* of Lesson, this being prior to *luridus* of Nitzsch. The range of this species is almost identical with that of *M. grammithorax*. Mr. Hume says it is rare in Tenasserim, and, according to

Mr. Davison, it is common in the Malay peninsula and on Singapore Island. It has also been obtained in Sumatra by Messrs. Wallace, Buxton, and H. O. Forbes; while in Borneo it has been procured at Sandakan by Mr. W. B. Pryer; Lumbidan (*Ussher, Treacher, & Low*); Lawas River (*Treacher*); Sarawak (*Doria & Beccari*); Jambusan and Tagora (*Everett*); Banjermassing (*Mottley & Schierbrand*); and also at Moára, Teweh, in the south-eastern portion of the island (*Fischer*).

4. MIGLYPTES JUGULARIS.

Meiglyptes jugularis, Blyth, J. A. S. B. xiv. p. 195 (1845); id. Cat. B. Mus. As. Soc. p. 60 (1849); Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 669. no. 977 (1856–58); Hume, Str. F. 1874, p. 471; id. & Oates, op. cit. 1875, p. 14; Hume & Davison, op. cit. 1878, vi. pp. 132 and 501; Oates, B. Brit. Burm. ii. p. 60 (1883).

Phaiopicus jugularis, Malh. Monogr. Picid. ii. p. 11 (1862).

Hemicircus jugularis, Gray, List Picid. Brit. Mus. p. 71 (1868); id. Hand-l. B. ii. p. 191. no. 8670 (1870).

Miglyptes jugularis, Hume, Str. F. 1879, p. 87; Bingham, op. cit. 1880, p. 161; Oates, op. cit. 1882, p. 190.

Adult male. Back and scapulars black; rump buffy white; wing-coverts black, tipped with buffy white, some of the median and greater series being barred with the same; a conspicuous and large patch of buffy white extending the whole length of the forearm, also a similar-coloured patch on the edge of the wing; bastard-wing and primary-coverts black; quills black, the outer primary unspotted, the next feather spotted with buffy white at the base only of both webs; the remaining quills minutely spotted with buffy white on the outer webs, the inner with large spots or notches of the same, some of the innermost feathers having the light markings on the inner webs confluent at the base, or with broad buffy white bars across both webs on their apical portion; shafts black; upper tail-coverts, tail, and tail-shafts black; forehead, crown, lores, and side of the face black, the lores being spotted with yellowish or buffy white, the remainder having narrow vermicular transverse markings of buffy white; a small dull red cheek-patch; occipital crest black, with slight traces of the vermicular light markings which cover the head; chin and throat black, spotted with buffy white; upper portion of the side of the neck black, the remainder buffy white, this colour spreading across the hind neck and forming a broad collar, then running in a broad stripe down the side of the chest; entire underparts black; sides of the body and flanks buffy white, varied with black; thighs buffy white, barred with black; under wing-coverts and axillaries uniform buffy white; "bill and claws black; legs and feet dirty dull green; irides dark brown" (*J. Darling*). Total length 6·5 inches, culmen 0·93, wing 4·05, tail 1·8, tarsus 0·8; toes (without claws)—outer anterior 0·55, outer posterior 0·55, inner anterior 0·35, inner posterior 0·28.

Adult female. Resembles the male, but is slightly browner and without the red cheek-patch; "bill black; irides dark brown; legs and feet green; claws horny" (*Bingham*). Total length 6·5 inches, culmen 0·85, wing 4, tail 1·8, tarsus 0·78.

The colouring of the light portions of the plumage in the above species varies considerably. In three males now before me one has the light patch upon the side of the neck and hind neck, the shoulder-patch, likewise the rump and under wing-coverts with a yellow tinge, another has these parts of a buff-colour inclining to rufous, and the third has the same parts of a buffy white without any yellow tinge. The bird with buff markings has the dark portions of the plumage of a browner shade, and the red malar stripe as bright as in the other two specimens.

This species has a restricted range. Mr. E. W. Oates says:—"In Upper Pegu it is decidedly rare; but occurring as it does both on the Arrakan and Pegu hills, it probably may also be met with on the intervening plains." Messrs. Hume and Davison, in their paper on the "Birds of Tenasserim" (Str. F. 1878, vi. p. 132), record the species from Pahpoon, Assoon, Meetan, Amherst, Lemyne, Yea, Meeta Myo, and

Tavoy; and in the Appendix (*t. c.* p. 501) they add—"the jungles at the foot of Nwalabo, and the country between this and Tavoy." Capt. Bingham (Str. Feath. 1880, p. 161) observes—"though not common, it still occurs here and there in the evergreen forests of the Thoungyeen." Siam has been given as a habitat by Blyth; and in the British Museum there is a specimen (formerly in the Gould collection) from that locality, procured by Mouhot or Schomburgk. Colonel Tickell, in his MS. Ill. Ind. Orn., describes and figures, as a male, a Tenasserim example; the red cheek-patch has, however, been omitted, showing that he had a female bird before him. Malherbe describes the present species as "less than *M. tristis*;" but his measurements show this to be a slip of the pen. I have examined specimens of *M. jugularis* in the collection of the British Museum, and also in that of Capt. Wardlaw Ramsay. The descriptions are taken from birds in my own museum.

XXI.—*Notes on Woodpeckers.*—No. VII. *Additional Notes on the Woodpeckers of the Ethiopian Region.* By Edward Hargitt, F.Z.S.

Through the kindness of Count Salvadori I have recently had an opportunity of examining some interesting Woodpeckers collected by the late Marquis Antinori in Schoa. Amongst them was an example of *Mesopicus spodocephalus*, a species which, at the time I wrote my paper on the African Woodpeckers, I had not had an opportunity of examining. It turns out to be a very distinct species, which I am glad to have the chance of describing, as it enables me to correct at the same time a very serious error which has crept into my key (Ibis, 1883, p. 406), for the detection of which I am also indebted to Count Salvadori. By a *lapsus calami* I have placed *M. goertan* and *M. spodocephalus* in the yellow-shafted section of the genus, instead of in the black-shafted section, and I therefore give an amended key to replace my former one.

Key to the Species.

a. Shafts of quills and of tail-feathers bright yellow or orange-brown above and below.
  a^1. Sinciput black, spotted with white; hinder crown and occiput red; colour above and below olive-dusky, narrowly barred with white; sides of face white.
    a^2. With a broad auricular stripe of black and a second broad moustachial band, the two *not* meeting on the side of the neck .... *namaquus.*
    b^2. Auricular band uniting with the moustachial band on the side of the neck .... *schoensis.*
b. Shafts of quills and of rectrices dark brown or black above, yellow or light brown below.
  b^1. Forehead ashy grey; crown and occiput red; rump and upper tail-coverts red.
    c^2. Centre of abdomen yellow, sometimes with a slight tinge of red .... *goertan.*
    d^2. Entire abdomen conspicuously red, extending on to the breast .... *spodocephalus.*
  c^1. Forehead, crown, and occiput, as well as the rump and upper tail-coverts, red.
    e^2. Above and below uniform golden olive, without moustachial or auricular stripes; face and throat slaty grey; lower part of abdomen centred with red .... *griseocephalus.*
    f^2. Above uniform golden olive; below dingy buffy white, striped and varied with black; a black moustache and auricular stripe; face and throat buffy white; a median stripe of red down the breast and the whole of the abdomen .. *pyrrhogaster.*
  d^1. Forehead and crown dark umber-brown, the feathers of the former tipped with white and the latter with yellow; occiput bright yellow; rump yellowish olive .... *xantholophus.*

It appears that in following von Heuglin with regard to *M. spodocephalus,* I had taken for granted that he was acquainted with the species; this now turns out not to have been the case, von Heuglin's so-called *M. spodocephalus* being nothing more than what has been termed the red-bellied variety of *M. goertan,* which, in my opinion, is nothing but the adult bird of that species. I append a full description of the true *M. spodocephalus,* taken from the specimen which Count Salvadori has been good enough to lend me, giving at the same time what I believe to be a detailed synonymy of the species, according to the views of Count Salvadori and myself.

MESOPICUS SPODOCEPHALUS.

Dendrobates poiocephalus, Rüpp. (non Sw.) Beschr. neuer abyss. Klettervögel, in Mus. Senckenb., Extra-Band iii. p. 119 (1842); id. Syst. Uebers. p. 86, pl. xxxiv. (1845); Heugl. Syst. Uebers. p. 47. no. 485 (1856).

Dendrobates spodocephalus, Bp. Consp. Gen. Av. i. p. 125 (1850).

Mesopicus spodocephalus, Bp. Consp. Volucr. Zygod. p. 9 (1854); Hartl. Orn. W.Afr. p. 180 (note) (1857).

Scolecotheres spodocephalus, Reichenb. Handb. Scans. Picinæ, p. 427, pl. dclxxvi. figs. 4471, 4472. (1854) (ex Rüpp.).

Dendropicus spodocephalus (pt.), Gray, List Picid. Brit. Mus. p. 68 (1868); id. Hand-l. B. ii. p. 190. n. 8660 (1870).

Adult female. Back and scapulars uniform golden olive, the feathers having brighter golden margins; wing-coverts browner than the back and more or less margined with golden olive; quills brown, the outer webs of the inner primaries margined with golden olive, those of the secondaries partially or entirely olive-brown, similarly margined; a few minute and almost obsolete yellowish spots on the outer webs of some of the primaries; the inner webs of the primaries at their base, and those of the secondaries along their whole length, spotted with white; the innermost secondaries washed with olive on the inner webs, shafts dark brown; rump and upper tail-coverts scarlet; tail brown, the lateral feathers with a few indistinct spots of yellowish brown, shafts dark brown; nasal plumes, entire head and neck, also the under surface of the body, bluish grey, the breast having a slight tinge of olive; the abdomen scarlet-vermilion; under tail-coverts uniform, and rather browner than the under surface of the body; under wing-coverts dull white, with a slight tinge of yellow, and having dusky barring. Total length 7 inches, culmen 0·9, wing 4·37, tail 2·3, tarsus 0·7; toes (without claws), outer anterior 0·56, outer posterior 0·62, inner anterior 0·45, inner posterior 0·3.

Considering that Bonaparte in all probability only knew this species from Rüppell's single type (a female, which is in the Frankfort Museum), I cannot see how he was able to describe the male as having the whole of the top of the head red, although this will doubtless prove to be the case.

XXII.—*On the Occurrence of* Œstrelata hæsitata *in Hungary.*

By W. Eagle Clarke, F.L.S.

When going over the collection of Hungarian birds in the National Museum at Buda-Pesth in May last, I was very much surprised to observe a specimen of *Œ. hæsitata.* This, I was informed by Dr. Madarász, the Curator in ornithology, had been killed in or near the village of Zolinki, in the county of Zips, in North Hungary, in the year 1870, and found its way into a local collection of birds, but was acquired by the museum in exchange during the same year.

The occurrence of this ocean-loving species in the very heart of Europe is not a little remarkable; and when I informed Professor Newton of the existence of this specimen, he, with his accustomed caution, advised me to have the identification confirmed by Herr von Pelzeln, whose acquaintance I had the pleasure of making when at Vienna. My friend Dr. Madarász kindly sent the bird to Vienna for examination; and Herr v. Pelzeln informed me shortly afterwards that it was "the bird figured by Temminck in the 'Planches Coloriées' (fig. 416), but in a younger dress."

This occurrence has not hitherto, I believe, been recorded; and unless, since the publication of Dresser's 'Birds of Europe,' there are some additional occurrences of which I am unaware, it is the third European specimen.

XXIII.—*Notices of recent Ornithological Publications.*

23. '*The Auk.*'

['The Auk,' a Quarterly Journal of Ornithology. Continuation of the 'Bulletin of the Nuttall Ornithological Club.' Vol. I. No. 1. January 1884. Boston, Mass.]

In our last Number (p. 60) we called attention to the inauguration of the American Ornithologists' Union, and we have now before us a copy of the first number of their new organ, which is called 'The Auk.'

It is not for us to criticize the wisdom of this title, although, in reply to the Shakesperian question "What's in a name?" we might say that there is a good deal in its appropriateness, or the reverse. But the reasons for its adoption are given; and we cordially desire for the new periodical a better fate than that which has befallen the most distinguished member of the family Alcidæ.

The first contribution is by Mr. C. B. Cory, who describes several new birds from the Island of San Domingo. In the Sylvicolidæ he institutes a new genus *Ligea* (scr. *Ligia*, the derivation being apparently λίγεια), the type being *Ligea palustris*, sp. n., which is described and figured. *Hirundo sclateri*, sp. n., is distinguished by its larger size, more slender bill, and blue forehead from *H. euchrysea* of Jamaica. In the Tanagridæ, *Phœnicophilus frugivorus*, recently described as new (Journ. Bost. Zool. Soc. ii. p. 45), is made the type of a distinct genus, *Calyptophilus*; also *Rupornis ridgwayi* and *Œdicnemus dominicensis* (tom. cit. p. 46) are redescribed.

The Notes on the birds of the Lower Uruguay are continued from the 'Nuttall Bulletin' by Mr. W. B. Barrows. There are several other papers of interest; Professor Augustus C. Merriam's criticisms on the Coues Lexicon of North American Birds, and Professor Elliott Coues's reply, entitled 'Ornithophilo logicalities,' are very amusing as far as they go; and a continuation of these scientific amenities is promised.

At the first congress of the American Ornithologists' Union held in New York city last September, a Committee was appointed to investigate the subject of migration of birds in the United States and British North America. The plan of the work and instructions to collaborators are set forth at considerable length; and if the response to the invitation is as cordial as may fairly be anticipated, the scheme of registered observations already commenced and so ably carried out by the Committee appointed by the British Association will find valued coadjutors in the New World. The Chairman of the American Committee is Dr. C. Hart Merriam.

24. *Blasius on Birds from Ecuador.*

[Ueber wahrscheinlich schon von den eingeborenen Sammlern und Jägern ausgeführte Fälschungen von Vogelbälgen aus Ecuador. Von Prof. Dr. Wilh. Blasius. Verh. f. Naturw. z. Braunschweig, iii. Jahresb. f. 1881–82 u. 1882–83, p. 68.]

The author remarks upon the fraudulent manufacture of specimens by native and other collectors in different parts of the world, especially in South America, and mentions sixteen specimens from Ecuador which he believes to have been made up with feathers of other birds.

25. *Blasius on Birds from Java.*

[Ueber eine kleine Sammlung von Vögeln aus Java. Von Prof. Dr. Wilh. Blasius. Verh. f. Naturw. z. Braunschweig, iii. Jahresb. f. 1881–82 u. 1882–83, p. 78.]

Herr Grabowsky, who, as our readers will recollect, has recently made a collection in the south-eastern portion of Borneo (*cf.* 'Ibis,' 1883, p. 563), has extended his excursions to Java, whence he has sent a small number of birds in spirits to the Brunswick Museum. The species, nine in number, are elaborately described by Prof. Blasius.

26. *Blasius on the Great Auk.*

[Ueber die letzten Vorkomnisse des Riesen-Alks (*Alca impennis*) und die in Braunschweig und an anderen Orten befindlichen Exemplare dieser Art. Von Prof. Dr. Wilhelm Blasius. Verh. f. Naturw. z. Braunschweig, iii. Jahresb. f. 1881–82 u. 1882–83, p. 89.]

The literature relating to the above-named species is noticed at considerable length, and details are given of a specimen which has recently come to light in Brunswick. In an alphabetical list Prof. Blasius enumerates the examples the existence of which is known to him, 74 in number. To these may be added a hitherto unrecorded specimen belonging to the Duke of Roxburghe, at Floors Castle, described and exhibited before the Royal Physical Society of Edinburgh on the 18th of April 1883. The eggs of the Great Auk are also noticed.

27. *Collett on three additions to the Norwegian Avifauna.*

[*Ardetta minuta* (Linn.), *Sterna cantiaca*, Gmel., og *Larus minutus*, Pall., nye for Norges Fauna. Af Robert Collett. Vid.-Selsk. Forh. 1883, no. 15.]

Examples of *Ardetta minuta, Sterna cantiaca*, and *Larus minutus* occurred in Norway, the first two in July 1883, and the last-named in October 1882, and are now in the University Museum of Copenhagen. Full particulars are given by Mr. Collett.

28. *Coppinger's Cruise of the 'Alert.'*

[Cruise of the 'Alert.' Four Years in Patagonian, Polynesian, and Mascarene Waters. (1878–82.) By R. W. Coppinger, M.D., Staff-Surgeon Royal Navy, C.M.Z.S. London: 1883. 1 vol. 8vo.]

No naturalist should omit to look through Dr. Coppinger's narrative of the Cruise of the 'Alert,' which is full of interesting information on every branch of natural history. Most of the time was spent in Patagonian waters; but many details are also given about the seldom-visited coral-reefs between the Seychelles and Madagascar, which were taken on the return home.

The ornithologist will read with pleasure the many episodes on bird-life interspersed throughout the volume, which relate to both land and marine species (see pp. 56, 87, 106, 207, 224, and 238). The supposed species of *Upucerthia*, of which the very curious burrowing habits are described at p. 142, is, we suppose, *Geositta cunicularia*. It would be desirable, however, to have this underground traveller positively identified, if there are specimens of it in the British Museum.

With regard to the Gulls observed in the Straits of Magellan, Dr. Coppinger makes some statements which are entirely at variance with the experience of every other observer, and also with the evidence to be derived from carefully sexed specimens, as well as general analogy. He states (p. 60) that the female of *Larus dominicanus* is brown, and that she pursues and robs the "black-backed (male) bird," as a Skua might do; also that, in the immature Dominican Gulls, the colour of the mandibles is "green, instead of orange as in the males, and black as in the females." The brown pursuing bird may have been a ravenous young one seeking food from the adult, as young Gulls will often do, or it may have actually been a Skua (*Stercorarius chilensis*); but there is no such sexual difference in plumage between the adults of *L. dominicanus* or of any other known Gull; nor have we ever seen, out of a hundred specimens, a young one with green mandibles.

29. *Doering on the Birds of the Rio Negro of Patagonia.*

[Informe Oficial de la Comision Científica agregada al Estado Mayor General de la Expedicion al Rio Negro (Patagonia), realizada en los meses de Abril, Mayo, y Junio de 1879, bajo las ordenes del General D. Julio A. Roca. Entrega I. Zoologia. Por el Dr. D. Adolfo Doering, con la colaboracion del Dr. D. Carlos Berg, y de D. Eduardo L. Holmberg. Buenos Aires: 1881.]

In 1879 the Argentine Government despatched an expedition to the Rio Negro of Patagonia under the command of General Roca, to stop the inroads of the marauding Indians. A scientific Commission was sent in their company, consisting of Dr. P. G. Lorentz, assisted by G. Niederlein, for Botany, and Dr. Doering, assisted by F. Schulz, of the Museum of Cordoba, for zoology and geology. The report on the birds obtained during the expedition, and the general observations on the fauna of the territory annexed, are from the pen of Dr. Doering, and both essays contain much interesting matter. The new territory is divided zoologically into four divisions—the Southern Pampas, the inter-riverine region (*i.e.* between the Rio Colorado and the Rio Negro and Rio Neuquen), the central mountain-range, and the eastern slope. The first two of these are discussed at full length and their peculiar animals are descanted upon; but the third and fourth regions were not touched upon by the expedition, and are in fact almost unexplored. The birds enumerated in the report are 110 in number, most of which are well-known Patagonian species. Dr. Doering contends that the *Synallaxis orbignii* of Sclater's synopsis (P. Z. S. 1879, p. 621) is the true *S. flavigularis*, Gould, and ought to bear that name. A map of the territory traversed and described in the Report would have much facilitated the understanding of it.

30. *Dybowski's additional Remarks on the Siberian Puffins.*

[Quelques remarques supplémentaires sur les Mormonidés. Par le Dr. Bénoît Dybowski. Bull. Soc. Zool. France, 1883, p. 348.]

These are supplementary to the paper noticed, 'Ibis,' 1883, p. 566, and relate principally to the winter dresses of the different species.

31. *Dybowski's Notes on the Birds of Kamtschatka.*

[Remarques sur les Oiseaux du Kamtschatka et des îles Comandores. Par le Dr. Bénoît Dybowski. Bull. Soc. Zool. France, 1883, p. 351.]

These are mostly field-notes on Kamtschatkan birds. *Astur candidissimus,* described as a new species, is apparently a white form of *A. atricapillus,* which is a permanent resident in the country, and feeds on the Ptarmigan in the winter. *Hirundo kamtschatica* and *Phyllopseuste homeyeri* are also described as new species, together with two new subspecies of *Corvus corax—C. corax kamtschaticus* and *C. corax bericyianus.*

32. *Godman and Salvin's 'Biologia Centrali-Americana.'*

[Biologia Centrali-Americana; or, Contributions to the Knowledge of the Fauna and Flora of Mexico and Central America. Edited by F.

DuCane Godman and Osbert Salvin. (Zoology.) Parts xxvi. and xxvii. 4to. London: 1883. Published for the Editors by R. H. Porter, 10 Chandos Street, Cavendish Square, W.]

The 26th part of this important work continues the Birds, and contains the Cœrebidæ and the commencement of the Tanagridæ. Of the former family 11 species are included in the Central-American avifauna—one, *Dacnis viguieri,* being now described and figured for the first time from Oustalet's MS. The type of this well-marked species in the Paris Museum was obtained on the Gulf of Darien in 1877 by Dr. Viguier. Of the Tanagridæ the genera *Chlorophonia* and *Euphonia* and the first seven species of *Calliste* are treated of. *Chlorophonia cyanodorsalis* of Dubois we look upon as a very questionable species: the type, after which Sclater has made special inquiries, is no longer in the Brussels Museum, if it ever was there; and no one knows what has become of it. Besides *Dacnis viguieri* already mentioned, the present number of the 'Biologia' contains excellent figures of both sexes of *Diglossa plumbea,* also of *Certhiola caboti, Euphoniæ luteicapilla, fulvicrissa,* and *gracilis, Calliste florida,* and *Pyranga erythrocephala.*

The 27th part continues the account of the Central-American Tanagridæ into the genus *Tachyphonus. Pyranga figlina* is described as a new species of the "*hepatica*" group. The type is from British Honduras. *Phœnicothraupis rhodinolæma,* a new form of the "*rubica*" group from Ecuador, is described in a footnote. We are not sure that it is laudable to give descriptions of new birds of one country in a work relating to another, although there are precedents for this practice. *Lanio leucothorax melanopygius* of Ridgway is elevated to specific rank as *L. melanopygius*; it is a southern representative of *L. leucothorax.* Figures are given of *Rhamphocœlus passerinii, R. uropygialis, Pyranga testacea* ♂ et ♀, *Chlorothraupis carmioli, Eucometis spodocephala, Tachyphonus chrysomelas* and *T. nitidissimus* (both sexes).

33. *Gould's 'Birds of New Guinea.'*

[The Birds of New Guinea and the adjacent Papuan Islands, including any new species that may be discovered in Australia. By [the late] John Gould, F.R.S. &c. Part XV. Folio. London: 1883.]

The fifteenth part of this work contains illustrations of the following species:—

Ninox forbesi.
Eos reticulata.
Sericornis beccarii.
—— arfakiana.
Lalage mœsta.
Dicæum fulgidum.
Myzomela annabellæ.
Drymacœdus beccarii.
Ptilopus wallacei.
Calornis crassa.
Rhipidura hamadryas.
—— fusco-rufa.
Pachycephala arctitorquis.

Except the *Eos*, the two species of *Sericornis*, and *Drymacœdus*, these are all novelties from Mr. H. O. Forbes's recent visit to the Tenimber group, and figured from his specimens. *Eos reticulata* is also figured from his specimens; but it might have been mentioned that there is a fine specimen of this Lory now alive in the Zoological Society's Gardens.

34. *Jullien on the Anatomy of* Aptenodytes.

[Remarques sur l'Anatomie de l'*Aptenodytes patagonica*, Gm. Par le Dr. Jules Jullien. Bull. Soc. Zool. France, 1882, p. 374.]

A description of the internal anatomy of the King Penguins (from a specimen that died in the Jardin d'Acclimatation), illustrated by two plates.

35. *Maingonnat on a new Species of* Argus.

[Lettre de M. Maingonnat. Bull. Soc. Zool. France, 1882, Procès-verb. p. xxv.]

M. Maingonnat's letter, read at the Meeting of the Soc. Zool. de France, describes *Rheinardius ocellatus* (*cf.* Ibis, 1883, p. 107) under the name *Argus rheinardi.*

36. *Oustalet's Ornithological Notes.*

[Notes d'Ornithologie (3^{e} série). Par M. E. Oustalet. Bull. Soc. Philom. sér. 7, vi. p. 254 (1882).]

M. Oustalet describes some recent acquisitions of the

Muséum d'Histoire Naturelle in the Class of Birds, and speaks first of the remarkable new Gallinaceous form (allied to *Argus*) *Rheinardius ocellatus*, of which two mounted examples are now in the gallery at Paris. The exact locality of this species has now been ascertained to be "Buih Dinh," a hundred leagues south of the Hué in Tonquin. Of *Merops revoilii*, another discovery of M. Oustalet, we have already spoken in our notice of Révoil's collections in Somali-land (Ibis, 1883, p. 107). M. Oustalet observes that the figure of the bird there given is defective in several particulars. Next M. Oustalet proceeds to speak of several interesting species of which examples are in the ornithological collections made by M. Marche in the Philippines—*Pitta kochi* (of which the young plumage is described), *Æthopyga flagrans*, and *Polyplectron emphanes*, all from the island of Luzon. A list is then given of the 63 species represented in a collection sent to the Museum by Dr. Harmand, Consul of France at Bangkok. Lastly the author enumerates the 14 species represented in a collection lately brought by Dr. Verneau from the Canaries, amongst which is an example of the Shrike locally known as "*l'Alcairon*" (? *Alcaudon*, the common Spanish name for any Shrike), which some previous authors have referred to *Lanius excubitor*, others to *L. algeriensis*. M. Oustalet states that this bird is astonishingly like *L. ludovicianus* of North America, and, in fact, only distinguishable by its rather stronger bill!

37. *Ramsay on the Zoology of New Guinea.*

[Contributions to the Zoology of New Guinea. By E. P. Ramsay, F.L.S. &c. Proc. Linn. Soc. N. S. W. viii. p. 15.]

Mr. Ramsay's eighth contribution to this engrossing subject (read January 31st, 1883, and published June 19th) is based upon "large and important collections" from the slopes of the Astrolabe range inland from Port Moresby, and is of special interest, as showing that as we ascend to a higher elevation in this part of New Guinea we meet with species previously known only from Mount Arfak, such as *Grallina bruijnii*, *Diphyllodes chrysopterus*, *Phlogœnas rufigula*, and

Ptilopus bellus. The following birds are described as new:—*Pœcilodryas sylvia, Myzomela eques, Eurostopodus astrolabæ, Ægotheles* (?) *plumifera, Paradisea susannæ, Rhamphomantis rollesi, Sittella albifrons,* and *Æluracedus melanocephalus,* all, apparently, from the Astrolabe range, except the *Paradisea,* which is our old friend *Paradisea decora* (Ibis, 1883, p. 199, pl. viii.) from D'Entrecasteaux Islands. There are likewise some brilliant novelties in eggs described, such as those of *Manucodia atra, Paradisea raggiana,* and *Drepanornis albertisi.* In the last case Mr. Hunstein is stated to have shot the female on the nest. The egg is "of a light dull cream-colour, with a reddish tinge, spotted all over with oblong dashes of reddish brown and light purplish grey, closer on the thick end."

38. *Sharpe on the Progress of Ornithology in* 1882.

[Zoological Record for 1882. Aves. By R. Bowdler Sharpe, F.L.S., F.Z.S., &c. London: 1883.]

The task of preparing the section "Aves" of our 'Zoological Record,' which for five consecutive years had been fulfilled by Saunders, has been undertaken for 1882 by Mr. Sharpe, whose industry seems never to fail when ornithological work of any kind is required to be done. We have every reason to be satisfied with its completeness. Occasional misprints (alas! we know it too well) are unavoidable; but on turning over the record of birds, more, we think we must say, have met our eyes than should have escaped careful supervision.

But what has much interested us is the "arrangement" adopted for the first time in the present 'Record,' which is "based upon the British Museum Catalogue of Birds." As it is understood that the great bird-gallery of the new Natural-History Museum will be set in order upon the same system, this "arrangement" becomes a matter of primary importance, and we must ask our friend to forgive us if we indulge in a few criticisms upon it. So far as they are given here, the principal divisions adopted run in the following order:—Accipitres, Passeriformes, Picariæ, Psittaci, Columbæ, Gallinæ, Geranomorphæ, Limicolæ, Gaviæ, Tubinares, Herodiones, Stenagopodes, Anseres, Pygopodes, Impennes, Crypturi, and Ratitæ. This, we suppose, is a kind of compromise between the old Grayian system and the new scheme based upon Huxley's ideas lately put forward in 'The Ibis' and elsewhere. Now, as we all know, it is impossible to express the complications of natural affinities in a linear series; but we do not see that the transfer of the three (obviously allied) orders Herodiones, Steganopodes, and Anseres to the lower position here assigned to them from that given to them in the system just alluded to possesses any advantages. At the same time it entirely destroys the symmetry of the great Schizognathine series, into the middle of which these Desmognathæ are thus thrust.

Again, we cannot understand Mr. Sharpe's reasons for rejecting the old-fashioned Linnean term Passeres, now generally in use for the mighty army of "small birds." The "Passeriformes" of Garrod and Forbes contain half the families placed by Mr. Sharpe in the "Picariæ," the other half of the Picarians being designated "Piciformes" †. It is quite a new and erroneous employment of the term "Passeriformes" to use it as an equivalent to Passeres. We trust, therefore, that this very obvious error will not be persisted in.

Mr. Sharpe does not, in the present arrangement, give any subdivisions of his Passeriformes, *i. e.* Passeres. But as he puts the non-Oscinine families at the end, we suppose that he recognizes the value of the great discoveries of Johann Müller as regards the variation of the Passerine organs of voice. Such being the case, it is manifestly incorrect to place the Tyrannidæ between the Dendrocolaptidæ and the Formicariidæ. The two last-named groups and the nearly allied Pteroptochidæ are the only known families of birds that possess the very singular structure of the lower larynx denominated by Müller "tracheophonine," and must be kept together by all those who in any way recognize the employment of the variations of laryngal structure in the classification of the Passeres.

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* See P. Z. S. 1874, p. 215.

As regards the typical Oscines, they are all so nearly allied that the particular order selected is perhaps hardly material. But it is obvious that the families with nine primaries only and those with the first (or outermost) nearly aborted present an extreme modification of the avian type. They should therefore be either first or last, and not in the middle of the ten-primaried Oscines, as is effected by commencing with the Crows and ending with the Starlings.

In conclusion, we are glad to see that *Cinclus* is no longer to be left as a genus of Troglodytinæ, and that the Myiadestidæ, Pycnonotidæ, and Mimidæ are divorced from their unnatural association with the Timeliidæ. But we regret to see that, although we believe Mr. Sharpe has now been convinced not to put his trust in "chin-angles," the "Prionopidæ" still remain as a family, instead of being dispersed into the various elements of which this mongrel group was originally composed.

39. *Shufeldt on the Osteology of* Podasocys montanus.

[Observations upon the Osteology of *Podasocys montanus*. By R. W. Shufeldt, M.D. Journ. Anat. & Phys. vol. xviii. p. 86.]

Dr. Shufeldt gives us here one of his excellent essays upon avian osteology. *Podasocys montanus* is a rare mountain Plover, of which skeletons were obtained from specimens collected on the arid plains of Wyoming in 1879. Except in the form of the lacrymal, and in the relative size of the ossified prefrontal processes of the ethmoid, the osseous structure of this Plover differs in no essential particular from that of *Charadrius*.

40. *Taczanowski's Second List of Birds from Kamtschatka.*

[Liste supplémentaire des Oiseaux recueillis par le Dr. Dybowski au Kamtschatka et aux îles Comandores. Par L. Taczanowski. Bull. Soc. Zool. France, 1883, p. 329.]

This is a continuation of the former paper (*cf.* Ibis, 1883, p. 575), and enumerates 67 species, making the total number of Kamtschatkan species obtained by Dybowski 134, and raising the number of East-Siberian birds enumerated by the author in his various papers to about 462. Detailed descriptions are given of *Tetrao camtschaticus*, Kittlitz, a form nearly allied to *Tetrao urogalloides*, Midd., and *Colymbus adamsi* is shown to be perfectly distinct from *C. glacialis*. The new name *Pœcilia macrura* is given to the form from Baikal previously described in the 'Bulletin' of 1882 as *P. borealis*.

XXIV.—*Letters, Announcements, &c.*

We have received the following letters addressed to the Editors of 'The Ibis:'—

Florence, Feb. 21, 1884.

Sirs,—With regard to the *Coccyzus americanus* shot near Turin, and mentioned in my former letter (Ibis, 1884, p. 115), I am glad to say that my friend Prof. Giglioli, acting with characteristic energy and promptitude, has succeeded in rescuing it from the unworthy use to which it had been put, and that it now forms an important addition to his most interesting and complete collection of Italian birds. He has also added to the collection another nearly adult specimen of *Porphyrio alleni*, which was killed near Modica, in the south-east of Sicily, Dec. 1881. This makes the third Italian-killed specimen of this species actually in existence, the other two having been procured in the marsh of Massaciuccoli, between Pisa and Viareggio. One of these, nearly adult, is in the Museum of Florence; the other, much younger, in that of Pisa*.

I am &c.,
E. Cavendish Taylor.

Zoological Museum, Turin,
March 10, 1884.

Sirs,—Our latest authority on the Turdidæ, Mr. Seebohm, in the fifth volume of the Catalogue of Birds in the British

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[* It may be remembered that there is an immature example of this species in the Museum of Madrid, obtained by Don Angel Guirao, near the Mar menor in South-eastern Spain, in the autumn of 1854 (*cf.* H. Saunders, Bull. Soc. Zool. Fr. 1877, p. 188).—Edd.]

Museum, published in 1881, makes no remarks on that curious bird which was named *Merula dactyloptera* by Bonaparte. He does not seem even to be aware of Bonaparte's description, as among the synonyms of *Merula merula*, p. 236, he quotes *Turdus dactylopterus*, Bp., fide Gray, Hand-list B. i. p. 255, n. 3714 (1869). In my opinion more completeness and care would be desirable in such a standard work as that mentioned, in which at least all the more important references ought to be included.

Besides this I wish to point out that in the history of this bird there has crept an important error as regards the locality from which it came.

The references belonging to the Hook-winged Ouzel, or Blackbird, are the following:—

Merula dactyloptera, Bp. Compt. Rend. Ac. Sc. Paris, xliii. p. 412 (1856); id. Institut, 1856, p. 313; Owen, Philos. Trans. vol. 153. p. 39, note (1863); Parker, P. Z. S. 1863, p. 515.

Turdus dactylopterus, Sclat. Ibis, 1881, p. 279; Swinh. Ibis, 1864, p. 364; Sharpe & Dresser, Birds of Eur. pt. x. p. 10 (1872); Gigl. Icon. Avif. Ital. sp. 104 (1883).

Turdus (*Merula*) *dactylopterus*, G. R. Gray, Hand-list, i. p. 255, no. 3714 (1869).

Merula dactylopterus, Gieb. Thes. Orn. ii. p. 578 (1875).

Sharpe and Dresser have given a woodcut of the wing of *M. dactyloptera*, type, and they have expressed the opinion that the bird is an individual variation of *Turdus merula*; "for," they say, "it must be remembered that, although many people have visited Palestine and Syria, no one has ever succeeded in getting a second specimen of the bird, and Bonaparte's type still remains unique in the Paris Museum."

Prof. Giglioli, who has inspected the type specimen, agrees with Sharpe and Dresser, and I, too, am inclined to be of the same opinion. But I must point out that Sharpe and Dresser's remark as to the bird never having been found again in Palestine and Syria has no value, since I have discovered that it did not come from there, but from the neighbourhood of Smyrna, in Asia Minor.

In a copy of Bonaparte's paper in which *Merula dactyloptera* was described, belonging to my friend the late Marquis Orazio Antinori, there is a manuscript note by him, which I translate, and which runs as follows:—"The Blackbird of which the author (Bonaparte) speaks was found by me, not in Syria, but in the neighbourhood of Smyrna, in Asia Minor, and it was sent by me to Bonaparte in Paris with the name *Merula unguiculata*. I believe that it is not a good species, but only a variety of *Merula vulgaris*."

It follows from this that in case of *Merula dactyloptera* not being an abnormal variation, researches should be made near Smyrna to have the chance of finding it again.

I am &c.,

T. Salvadori.

Ridgway Ornithological Club.—The Ridgway Ornithological Club of Chicago, Ill., held its regular monthly meeting on February 7th. Donations of specimens and books were received, and three new members elected. Mr. Gault exhibited a specimen of a hybrid between a Coot and a Gallinule, and Mr. Raddin showed an albino red-tailed Hawk. A paper by Dr. Morris Gibbs, of Howard City, Mich., on the "Genus *Empidonax*," was read; also papers by Mr. H. K. Coale on "Summer Birds of Hyde Park, Ill., and Winter Birds of Stark County, Indiana." The Club was presented with a life-sized portrait of Prof. Ridgway, with his best wishes.

Eurynorhynchus pygmæus.—Dr. Hartlaub writes to us that the Bremen Collection has lately received a fine specimen of this eccentric Wader from the island of Hainan, where it was shot by Herr Schomberg.

Expedition to Kilimanjaro.—Mr. H. H. Johnston, whose recently issued volume on the Congo we propose to notice in our next number, left England on the 4th of April last, *en route* for Zanzibar. Mr. Johnston goes out at the expense of the Royal Society and the British Association, for the special purpose of investigating the flora and fauna of Mount Kilimanjaro.

THE IBIS.

FIFTH SERIES.

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XXV.—*Additional Notes on the Ornithology of Transvaal.* By Thomas Ayres. Communicated by John Henry Gurney.

[Continued from 'The Ibis,' 1880, p. 273.]

[In the following Notes such species as Mr. Ayres had not previously recorded from Transvaal are numbered consecutively with his former lists.—J. H. G.]

358. Circaetus cinereus, Vieill. Cinereous Harrier-Eagle.

Female, shot in the Rustenburg district, July 20, 1882. Length in the flesh 28 inches, 5 feet across the wings. Bill horn-colour, nearly black; legs ashy; eye yellow.

Female, from the same locality, shot November 7, 1882. Length in the flesh 28·50 inches. Bill dusky, ashy about the base; tarsi and feet dingy white.

One of these specimens was gorged to the chin with two large snakes, each at least 4 feet long, and swallowed whole.

This species is found about the Klooft at Magaliesbergen. It is solitary in its habits, and settles on trees, generally on the tops of those of which the foliage is dense; when sitting it erects the frill at the back of the head, which gives it a crested appearance. There can be no doubt that *C. cinereus* is quite distinct from *C. pectoralis,* and I should not think that any one seeing both species in the flesh could suppose them to be the same, though both are snake-eating Eagles.

[I have taken the following additional measurements from these two specimens, which may be compared with those recorded in 'The Ibis' for 1878, p. 163, and for 1880, p. 258:—

	Wing.	Tarsus.	Middle toe *s. u.*	Culmen *s. c.*
	in.	in.	in.	in.
No. 1	22·40	3·75	2·50	2·10
„ 2	22·35	3·65	2·45	2·15

The upper surface in both birds is entirely of a dark brown, except that in No. 1 the feathers of the upper tail-coverts are crossed by an imperfect white bar near the base and are also tipped with white; the tail in both specimens exhibits three cross bars of brownish grey and a narrow white tip, the interspaces being blackish brown.

With the exception of two white cross bars and a white tip on the feathers of the under tail-coverts, the entire under surface in both birds is dark brown, with no white bases to the feathers, except to a very slight extent on the abdomen in No. 1.—J. H. G.]

Circus macrurus (Gmel.). Swainson's Harrier.

These Harriers have a fine time of it when the farmers shoot the numerous Finches (*Euplectes taha, Chera progne,* &c.) which destroy so much of their corn; the Harriers are then particularly busy coursing over the fields and stubbles for wounded birds, from which they get many a good meal. Although their flight when hunting is usually rather leisurely and somewhat wavering, it is astonishing with what rapidity they apparently turn over and seize their victim, be it chicken or other bird; the swarms of Finches often dart into the thickest parts of the nearest leafy trees on the approach of their enemy and wait till the danger is past.

[In 'The Ibis' for 1871, p. 148, Mr. Ayres remarked that this species is only found in Transvaal during the southern summer, in illustration of which I may mention that of ten

Transvaal specimens which he has sent me, two were shot in November, one in December, four in January, one in February, and two in March.—J. H. G.]

ASTURINULA MONOGRAMMICA (Temm.). One-streaked Hawk.

Male, immature, shot near Rustenburg, 30th June, 1882. Eye brown; legs and cere red.

Male, adult, same locality, 21st July, 1882. Eye dark brick-red; legs and cere red. The stomach of this specimen contained the remains of a large lizard. In habits this species resembles the Bush-Hawks; it settles on high trees, but not on the top; it is quick on the wing, but is usually not so shy as most others of its family.

SCELOSPIZIAS POLYZONOIDES (Smith). Smith's Many-banded Hawk.

Female, adult, shot 29th June, 1881.

Male, immature in change to adult dress, shot 17th July, 1882.

This species is never plentiful, but more are to be seen in our winter than in our summer months, possibly in consequence of the foliage being then less dense. The stomach of one of the specimens sent contained mice.

359. NISAËTUS BELLICOSUS (Daud.). Martial Hawk-Eagle.

A friend of mine, with whom I was out shooting on the hills a few miles from Potchefstroom, managed to kill a magnificent Eagle of this species which had been making a meal off a steinbuck.

[Mr. Ayres was not able to send me this specimen, but I have no doubt that he correctly identified it.

I have recently been informed by Count T. Salvadori that a collection made in Schoa by the late Marquis Antinori contains no less than seven examples of this fine species.—J. H. G.]

360. NISAETUS SPILOGASTER (Du Bus). Du Bus's Hawk-Eagle.

Female, adult, shot near Rustenburg, 29th June, 1882.

Length 26 inches, tail 12, wing 16·50. Eye yellow; toes greenish yellow; cere greenish; bill black. This Eagle swooped down from the mountain and seized a Rameron Pigeon which my brother had wounded; he fired at it and missed, but it only flew a few yards and settled on a dead tree, evidently not liking to give up its prey, and remaining there till he loaded again and shot it. Another of these Eagles caught a full-grown fowl and ate it within a foot of the back wall of my brother's house. This Eagle is exceedingly destructive to poultry; descending from the highest parts of the mountains, it skims quietly close to the ground, and, covered by any convenient clump of bushes or trees, it alights on the ground as near as it can, and running among the grass or other cover, seizes an unhappy fowl from amongst the frightened lot and proceeds to eat it on the spot. It is very quick on the wing, and, though very fearless when hungry, is generally very shy and difficult to approach. Its vision is wonderfully good; my brother one day shot at and slightly wounded a little *Elanus cæruleus*, when a pair of these Eagles swooped down with the greatest velocity from the top of the mountain, a good mile away, and immediately gave chase to the *Elanus*, which for a long time evaded its fate by dodging its powerful enemies, but was at last seized just as the three disappeared behind some trees.

The above observations are the result of my brother's experience of these Eagles; I have myself only seen them at a great distance, soaring quietly about the highest part of the Magaliesbergen.

361. Aquila wahlbergi, Sund. Wahlberg's Eagle.

Male, shot near Rustenburg, 20th December, 1882. Iris hazel; bill black, but bluish towards the base; gape, cere, and feet pale yellow. Length 23·50 inches. Stomach contained a small lizard.

Wahlberg's Eagle is not unfrequently met with amongst the Magaliesbergen, either singly or in pairs. On one occasion my brother saw two of them attacking something on the ground, in turn darting down and rising again, until at length both birds alighted, and on my brother going to the spot he found that they had killed and had already partially devoured a very large and poisonous snake called by the Boers the "Swart Ring-hals."

AQUILA VERREAUXI, Less. Verreaux's Eagle.

Male, very nearly adult, shot near Rustenburg, October 1882. Iris hazel; bill whitish ashy, but darker towards the tip; cere light yellow, this tint extending also on to the basal portion of the bill; bare skin about the eye light yellow; feet dirty yellow. Length 29 inches.

This is the only specimen of this lovely Eagle which has fallen to my gun; but amongst the Magaliesbergen it is not uncommon, and is always, according to my observation, in pairs. It is conspicuous from its jet-black plumage and white back. It nests on the ledges of precipices, generally choosing such as are inaccessible. The Boers say that it usually hunts in couples, carrying off their young goats, fowls, &c.; they also assert that when it finds a "klipspringer" (our chamois) on the edge of a precipice, it dashes at it with wonderful force, and knocking off its victim, follows it with such velocity as to reach it almost immediately after it has been killed by its fall on the rocks below; it is even said that the much larger "Rehbuck" frequently shares the same fate, and I have no doubt of the truth of the statement.

When this Eagle is freshly killed its powerful build is very noticeable, as are also its wonderfully heavy and powerful legs and its enormous feet and claws.

The specimen now sent I shot amongst the mountains. Observing two of them, probably a pair, I sat down amongst some rocks on the edge of a precipice and waited till, as they were circling about, the cock bird came within range of an A A A, which brought him down to the bottom; I waited a little longer before descending to secure my prize, and by doing so I very nearly obtained the other also.

362. TINNUNCULUS PEKINENSIS, Swinh. Eastern Grey-winged Kestrel.

[Mr. Ayres has sent two adult male Kestrels, which appear to me to be referable to the doubtfully distinct Oriental race of *T. cenchris,* for which the late Mr. Swinhoe proposed the subspecific appellation of *T. pekinensis,* and in which the grey on the wing-coverts reaches to the carpal joint with but very little admixture of rufous. The occurrence of these specimens in South-eastern Africa is probably analogous to that of *Erythropus amurensis,* indicating a migration from India to Africa; unless, indeed, some western specimens assimilate in coloration to those of the east; but I have seen none such from either Europe or Western Asia, and none from Africa, excepting the two now referred to. Of these, one was shot about thirty miles from Potchefstroom on 27th January, and a female, which may probably also belong to the eastern race, was shot on the same day and at the same place; but I may mention that the females of the two races are not distinguishable. Some normal males of *T. cenchris* were also killed in the same locality within a few days of the same date; and Mr. Ayres notes that they were there "in considerable numbers," possibly attracted by locusts, on which one of the birds shot was found to have been feeding.

The other male of *T. pekinensis* was obtained at Potchefstroom in the month of June, which, I believe, is an unusual time of year for the occurrence in South Africa of *T. pekinensis.*

The specimens sent by Mr. Ayres have been added to the collection in the Norwich Museum.—J. H. G.]

CAPRIMULGUS EUROPÆUS, Linn. European Goatsucker.

Male, Rustenburg, 11th February, 1880. Stomach contained large dung-beetles.

CYPSELUS CAFFER, Licht. African White-rumped Swift.

A pair of these Swifts took possession, as usual, of a Swallow's nest under the eaves of my house; and the last lot of young Swifts, two in number, were nearly ready to fly in the beginning of March, by which time most birds of this species had left this part of the country.

Merops nubicoides, DesMurs. Carmine-throated Bee-eater.

Male and female. Iris umber-brown; bill black; tarsi and feet dingy ash-brown.

I found a fair sprinkling of these very handsome Bee-eaters on the Eland's river in the Rustenburg district in January 1883; the nearly full-grown young birds were with the old ones. This Bee-eater is much tamer and more easy to approach than most of the genus, but it is not often met with.

363. Merops apiaster, Linn. European Bee-eater.

Three specimens sent, shot in December (2nd), January (26th), and February.

This species was very plentiful in the Rustenburg district during February and March 1882, and again during our summer in the following year.

Ceryle maxima (Pall.). Great African Kingfisher.

Female, shot 4th February.

In this specimen the tail-feathers seem to have been shed all at once, and the partly-grown new feathers to be making their appearance in the same way. It is a scarce species throughout this country.

Cuculus canorus, Linn. European Cuckoo.

[Mr. Ayres sends two males, both shot on the same farm, about thirty miles from Potchefstroom, one on the 21st January, 1879, the date when the other was procured being unfortunately not recorded; each of the birds had been feeding on caterpillars. Both birds show marks of immaturity, but have attained the adult dress, with the exception of some slight remains of the previous plumage on the jugulum and abdomen, and excepting also a few primaries belonging to the immature dress, and, in the case of the specimen of which the date is recorded, a few feathers of similar age in the wing-coverts.

I have at different times received from Mr. Ayres five South-African specimens of the European Cuckoo, including the above, all of which have exhibited slight remains of immature plumage.

It occasionally happens that young Cuckoos commence the assumption of the adult dress before leaving England; I have recently seen two such (one killed on the 1st, the other on the 2nd of September) which had acquired some adult rectrices, and one of which also showed a considerable patch of adult plumage on the throat and upper breast.—J. H. G.]

Chrysococcyx cupreus (Bodd.). Didric Cuckoo.

I was informed that towards the end of our summer in 1880 these Cuckoos were to be found in hundreds along the Rhinoster river, near Cronstadt, where they were doubtless collecting to migrate. Transvaal seems to be one of their chief breeding-countries, the Sparrow (*Passer arcuatus*) being their most frequent foster-parent.

[Judging from the specimens sent to me by Mr. Ayres, the sexes in this species are alike when fully adult, except that in the female the upper breast is suffused with a very slight tinge of fulvous, and that, according to the memoranda attached to the skins by Mr. Ayres, the eyelid is "crimson" in the male and "dusky" in the female. Mr. Ayres has also sent several memoranda as to the colour of the bill, which in young birds is "orange-red" or "light red-brown," altering as the bird grows older till, when it is adult, the bill is black, with an "ashy pale" base to the lower mandible; on the other hand the iris, which is noted as "red" in the adult male and "dull red" in the adult female, in younger birds is either "light grey," "tawny ash-colour," or "light tawny brown."

I have received from Mr. Ayres specimens of this Cuckoo killed in Transvaal in the months of October, December, January, February, and March.—J. H. G.]

364. Coccystes caffer (Licht.). Levaillant's Cuckoo.

Three females, shot in the Rustenburg district, 3rd November, 1882, 17th January and 4th February, 1883. Iris dark brown or dusky umber; bill black; tarsi and feet ash-colour. Caterpillars in stomach of one specimen.

This very fine Cuckoo was tolerably plentiful during our spring months (October and November) in 1882 all about the wooded parts of the Magaliesbergen, becoming scarcer as the summer came on. It is shy and difficult to approach, but its loud harsh cries often attract attention; it is not unfrequently mobbed by small birds.

CENTROPUS SENEGALENSIS (Linn.). Burchell's Spur-heel Cuckoo.

Male, Potchefstroom, June 1882. Iris blood-red; bill light ashy, but black on the ridge and at the tip; tarsi and feet bluish ashy. Stomach contained a mixed cargo of grasshoppers, large bugs (very strong-smelling), a large lizard's tail, and a good sprinkling of crab-shells.

Female, Rustenburg, December 18, 1882. Iris red; tarsi and feet ash-colour.

This species appears to be gradually on the increase in the Potchefstroom district; as each successive summer comes round, I hear more and more its monotonous and melancholy note, not unfrequently even in the thick hedgerows of the town itself; but being exceedingly shy and retiring in its habits, it is not often seen. In the wooded country of the Rustenburg district it is far more common, especially along the streams; it builds a clumsy nest of coarse grass in the low bush and lays white eggs.

[As this is a very variable species, it may be worth while to add a few particulars of the two specimens above referred to; the following are the principal measurements:—

	Total length.	Wing.	Tarsus.	Middle toe *s. u.*
	in.	in.	in.	in.
Male (in the flesh)	15·50	6·25	1·60	1·15
Female (in the skin) ..	16·25	7·10	1·80	1·30

The plumage of the male agrees with the description given in Sharpe's Layard, p. 163, except that the under wing-coverts are a rich rufous brown instead of being "pale buff;" the secondaries are also crossed by numerous bars of brownish black, which may probably be the remains of immature plumage. The female differs from the male in the absence of these bars, and also in the bill being entirely black, and the head and nape, especially the latter, much more richly glossed with dark bluish green.—J. H. G.]

BARBATULA EXTONI, Layard. Exton's Barbet.

My friend Mr. Lucas found a nest of this little Barbet with young ones in December; the birds had bored a hole in the rotten bough of a tree in the woods of the Magaliesbergen, where this species is plentiful.

CISTICOLA ABERRANS (Smith). Aberrant Fantail.

I feel pretty sure that Mr. Gurney was right in stating, in 'The Ibis' for 1880, p. 101, that *C. smithii* and *C. aberrans* are distinct species, the latter being much the scarcer bird here, and found in the scrub of the open plains, where the former is seldom met with. *C. smithi* is about the commonest Warbler of the warmer and wooded parts of Transvaal, which commence on the northern slopes of the range of mountains called "Wit-waters-raand." This range forms the watershed which divides the streams that run northward into the Limpopo from those that, flowing southward, empty themselves into the Vaal river, this watershed being the boundary between the open, cold, and healthy country to the south, and the wooded, hot, and more fever-stricken district to the north.

CINNYRIS MARIQUENSIS, Smith. Southern Bifasciated Sun-bird.

This Sun-bird is by no means uncommon along the banks of the Eland's river, a little to the north of Rustenburg.

[In 'The Ibis,' for 1871, p. 150, the previous note of Mr. Ayres on this species is given under the head of "*Cinnyris bifasciata.*"—J. H. G.]

CINNYRIS AMETHYSTINUS (Shaw). Amethyst Sun-bird.

This species is commom amongst the Magaliesbergen, especially during our winter months, June, July, and August, when it is in its brightest plumage.

CINNYRIS TALATALA, Smith. Andersson's Sun-bird.

This tiny and beautiful Honey-sucker is a common Magaliesbergen species both in winter and summer; it breeds, as also do the two preceding species, amongst the bushes in suitable localities.

365. Terpsiphone perspicillata (Swains.). Tchitrec Flycatcher.

This species is sparsely scattered throughout the Magaliesbergen, frequenting well-wooded ravines and valleys; it disappears during our winter months, returning somewhat late in the spring; it is restless in its habits, shy, and difficult to shoot. The cock birds frequently utter a short but somewhat sweet little song. There is much individual variation in the length of the tail.

Muscicapa grisola, Linn. Spotted Flycatcher.

This species is a regular visitor during our summer, and, I think, is then universal in Transvaal wherever there is bush, but never plentiful, and always either solitary or in pairs.

Hirundo semirufa, Sund. Rufous-breasted Swallow.

This very fine Swallow is much more plentiful in the warmer Rustenburg district than in the open and colder country round Potchefstroom. Last year a pair built in an old brick-kiln on the outskirts of the village of Rustenburg; the nest much resembled that of *H. cucullata.*

Hirundo dimidiata, Sund. Pearly-breasted Swallow.

One gusty evening in March 1882 a good many of these little Swallows flew wildly past in the gloaming, apparently in a great hurry.

[These were perhaps arriving in Transvaal for the southern winter (see Mr. Ayres's note in 'The Ibis,' 1879, p. 291). The specimens which I have received from Transvaal were obtained in May, July, August, and October, which scarcely accords with the experience of the late Mr. Andersson, who, in his Damara-Land notes, p. 52, speaks of having seen them on the Okavango river "as early as the 1st of September," of their arrival in Damara Land "about November," and of their nesting in that country in December. This difference of habit as observed in South-eastern and South-western Africa at about the same latitude is, I think, remarkable.—J. H. G.]

366. Hirundo puella, Temm. Lesser Striped-breasted Swallow.

Female, Rustenburg, 11th October. Iris greyish brown.

This species is a miniature of *H. cucullata*, inhabiting the warm bush-veldt country, apparently from the Rustenburg district northwards. I found it breeding sparsely in small caves (a nest in each cave) in the banks of a stream near the village; the eggs are white; the nest much resembles that of *H. cucullata*, but is smaller.

[I have specimens of this Swallow collected by the late Mr. E. C. Buxton near the Lobombo mountains, on the eastern frontier of Transvaal.—J. H. G.]

367. Pholidauges verreauxi, Bocage. Verreaux's Glossy Thrush.

This species is very plentiful during the summer months in the Rustenburg district, where it breeds freely in all suitable localities; its nest, like that of the other Grackles, is placed in the hole of a tree, and is lined with fresh green soft leaves.

Hyphantornis velatus (Vieill.). Black-veiled Weaver-bird.

The birds of this species that frequent the mountainous parts of the Rustenburg district, where the country is wooded and warm, appear to me to be very much smaller, and also much brighter in plumage, as a rule, than those inhabiting the more open plains of the same district and other open parts of the Transvaal. Adapting their manners to circumstances, they hang their nests to low bushes and trees overhanging the streams, whereas in the open country their nests are usually placed between two reeds in the swamps or on the reedy banks of rivers, though even there the nests are occasionally to be found hanging from the outer twigs of trees. The eggs of the smaller race vary in colour just as those of the larger and less gaudy birds.

[The smaller race alluded to by Mr. Ayres appears to be that to which Vieillot gave the specific name of "*velatus*;" his description ('Encyclopédie Méthodique,' p. 701) agrees better with it than with the larger race, and he also speaks of its occurrence in Namaqua Land, which accords with the late Mr. Andersson's remark that it "is common in Damara Land and the parts adjacent" (*vide* 'Birds of Damara Land,' p. 169). The larger race, if admitted as subspecifically distinct, will bear Sir A. Smith's name of "*mariquensis*."

I recorded the two races, under the names above mentioned, in 'The Ibis' for 1871, p. 254; but in the volume for 1880, p. 106, I applied, erroneously as I now believe, that of "*vitellinus*," instead of "*velatus*," to a Transvaal example of the smaller race.

I have taken the following measurements, which may be worth recording:—

	Wing. in.	Tarsus. in.	Culmen. in.
	H. mariquensis from Potchefstroom.		
Four males	3·20–3·50	0·90–1·05	0·65–0·72
Three females ..	3·00–3·10	0·80	0·62–0·65
	H. velatus from Rustenburg.		
Five males	2·90–3·20	0·70–0·85	0·55–0·65
One female	2·80	0·75	0·60
	H. velatus from Damara Land.		
One female	2·80	0·70	0·50

Measurements taken by Mr. Andersson from three other specimens of *H. velatus* will be found at p. 170 of his notes on the birds of Damara Land.—J. H. G.]

PYROMELANA TAHA (Smith). Taha Bishop-bird.

Notwithstanding the multitudes of this species and of *P. oryx* that were killed here during the very severe snow-storm in our winter of 1881, their numbers now (April 1882) seem to be but little diminished; neither is *Estrelda subflava* less numerous than usual, but *Estrelda astrild* and *Vidua erythrorhyncha* are very noticeably thinned. The snow remained on the ground for a week or more, covering the grass-seeds on which many small kinds of birds feed; and this, with the unusual cold, killed a marvellous number of them, and also many large birds, besides a great number of antelopes and other animals.

In the winter season flocks of this species, and also of *P. oryx* and of *Quelea sanguinirostris,* come for miles up the river from their favourite patches of reeds in the swamps where they roost, to feed on the minute grass-seeds in the old cultivated ground about Potchefstroom, returning in large flights to the same swamps in the evening. Although the different species feed together, often also in company with flocks of *Passer arcuatus,* so closely that they may be killed by the same shot, yet, in going to their feeding-grounds and in returning to their roosting-places, the birds of each species keep by themselves in separate flocks, notwithstanding their habit of mingling whilst feeding.

PASSER DIFFUSUS, Smith. Southern Grey-headed Sparrow.

These Sparrows are found sparsely in the town of Potchefstroom, and appear to breed in the same localities and to make much the same kind of untidy nest as *P. arcuatus* and our English Sparrow. Last season a pair of them took possession of an old Swallow's nest, but were driven away by *P. arcuatus.*

PETRONIA PETRONELLA (Licht.). South-African Rock-Sparrow.

This species affects the wooded and warm country where rocks abound.

FRINGILLARIA CAPENSIS (Linn.). Cape Bunting.

This is by no means a plentiful bird in Transvaal, as far as I am acquainted with it.

[This species was recorded in Mr. Ayres's previous lists of Transvaal birds under its synonym of *F. vittata*; and in 'The Ibis' for 1878, p. 297, the English name of "Rock-Bunting" was assigned to it, which, in Mr. Sharpe's edition of Mr. Layard's work, is applied to *F. tahapisi.*—J. H. G.]

Spizocorys conirostris (Sund.). Pink-billed Lark.

During the month of August 1881 these Larks were much more plentiful than usual; on the open flats near Potchefstroom one put them up at almost every step.

368. Mirafra nigricans (Sund.). Wahlberg's Lark.

Male, shot 10th January, 1882. Iris hazel; bill dusky, but pale at the base of the under mandible; tarsi and feet yellowish white. Total length 8 inches, wing $4\frac{3}{4}$, tail 3, tarsus $1\frac{3}{8}$. Stomach contained locusts.

This, to me, exceedingly scarce bird was shot amongst the hills to the north of Rustenburg, within six miles of the Crocodile river; it was a solitary bird, running on some flat rocks with much sheltering scrub about, and very Pipit-like in its appearance and manners.

[The specimen sent, which has been added to the collection of the British Museum, is probably a younger male than that described and figured by Du Bocage in his 'Ornithologie d'Angola,' p. 376, pl. 8. fig. 1. When killed it was moulting, but the moult was nearly completed, though the primaries and some of the rectrices had not been renewed; all the new feathers of the upper surface are blackish brown, but are edged with rufescent fulvous, except the secondaries, which are tipped with white; the older feathers are paler than the new and are evidently faded; the under surface agrees with the description and figure above referred to, except that all the white portions of the plumage are tinged with fulvous.—J. H. G.]

Anthus brachyurus, Sund. Short-tailed Pipit.

The specimens sent were shot in the Rustenburg district. These Pipits seem to be very locally distributed on the sloping sides of mountains and the neighbouring valleys, where bush and trees are pretty thickly scattered; they are frequently to be found close to some scrubby bush, and on being approached they often quietly move round out of sight, or squat close, and then rise almost under one's feet if the cover is at all good. Though generally alighting on the ground, they occasionally settle on a bush or tree; they have a quicker and more eccentric flight than most of the Pipits and alight very suddenly.

BUDYTES FLAVA (Linn.). Blue-headed Wagtail.

April 17, 1882. These Wagtails have lately left us, disappearing gradually after having been unusually plentiful this season; they are particularly fond of accompanying sheep, picking up the insects disturbed by their feeding, and often alighting on their backs, where they seem to be quite at home, the sheep, apparently, not taking the slightest notice of them.

LANIARIUS ATROCOCCINEUS, Burch. Crimson-breasted Bush-Shrike.

Although this Shrike, according to my experience, is exceedingly shy and difficult to shoot, still one may often get very close to it amongst the dense thorny thickets which it loves. The loud note, a short *chuck-chuck,* which it frequently utters, may sometimes be heard half a mile away; and the bird, very usually, on an enemy's approach, quietly glides out low on the opposite side of some thorny bit of jungle and away to the next patch; this is repeated till a regular round is taken, and the bird and the hunter start again from the first bit of bush and repeat the round without even a snap-shot being obtained.

FRANCOLINUS SUBTORQUATUS, Smith. Coqui Francolin.

Chick, half-grown, shot 8th December. This was one of a brood which got up almost like a bevy of Quails, for which I mistook them when I fired, as they were nearly as strong on the wing.

CURSORIUS CHALCOPTERUS, Temm. Bronze-winged Courser.

This is a very scarce Plover with us, but I found six or eight, some of them birds of the year, amongst thorn-scrub on Mr. Dunn's farm near Potchefstroom; they are quick on the wing, and are over the trees and out of shot in a twinkling.

GLAREOLA NORDMANNI, Finsch. Nordmann's Pratincole.

Notwithstanding the almost total disappearance of locusts from the country for some years, this Plover is as plentiful as ever, and makes itself happy on a beetle diet.

TOTANUS CANESCENS (Gmel.). Greenshank.

Female, shot near Potchefstroom, 28th October.

In 1883 the Greenshank was unusually numerous.

ARDEA BUBULCUS, Audouin. Western Buff-backed Heron.

This species is most plentiful with us in January and February, after which the majority of these birds seem to leave us; during the above-named months they are found in small flocks; they roost amongst the reedy swamps, and always at the same spots.

ARDETTA PODICEPS (Bon.). Rufous-necked Little Bittern.

Male, in nearly full dress, shot July 1882. Iris yellow; bill yellowish green with the ridge dusky brown; tarsi and feet dull green with the hinder parts and soles of feet orange-yellow. Stomach contained a perch of at least 2 oz. in weight.

[Other specimens sent by Mr. Ayres were obtained in the months of January, March, April, and September.—J. H. G.]

NYCTICORAX GRISEUS (Linn.). European Night-Heron.

This species appears to be gradually getting scarcer about Potchefstroom.

PHALACROCORAX AFRICANUS (Gmel.). African Long-tailed Cormorant.

One fine day I saw one of these Cormorants catching small fish in water not more than six to twelve inches deep; and it was amusing to watch how it skimmed along the bottom, only raising its head every now and again above the water to swallow a fish. These birds will keep well under water whilst chasing the small fish right up to the edge of a pool amongst the sedges with wonderful speed and dexterity.

XXVI.—*A few Ornithological Notes and Corrections.*

By W. Edwin Brooks.

In the 'Natural History Transactions of Northumberland and Durham,' vol. vi. page 53, my friend John Hancock says, "When the Brown Linnet is kept in confinement it loses the red on the breast on the first moult, and never afterwards regains it, but continues in the plumage of the Grey Linnet. The fact is, that the males, after shedding the nest-feathers, get a red breast, which they retain only during the first season; they then assume the garb of the female, which is retained for the rest of their lives, as in the case of the Crossbill."

In this observation Mr. Hancock is quite correct, but the rule applies to other groups besides the Linnets. The majority of old males of *Pinicola enucleator*, for instance, are found in the yellow female plumage; but I shot one which was of a pale pinkish orange, or light salmon-colour: this was so badly mangled that I did not preserve it. I also saw a second one of the same colour. Whether this intermediate plumage is general, or only occasional, I cannot say.

During the winter of 1882–83 I procured a large series of *Linota linaria* (Mealy Redpole). Of about forty males, only half a dozen were in the red plumage, and the finest and largest males were in the grey female plumage, merely having the bright red on the crown of the head. Some of them had a few little brownish-red, or rather reddish-brown specks on the cheeks. What age they were, compared with those absolutely like the females, I cannot say. The females varied a little, some, instead of having the top of the head deep crimson, had it dull rusty brown: whether this indicates great age or the reverse I do not know; I should think the former.

The *Carpodacus* group have the *mature* male plumage plain brown, like that of the female. I do not know how many brown males of *C. erythrinus* I shot in India up to pretty late in the spring. All these I then labelled as "young ♂." Since I came to Canada I have had opportunities of observing

Carpodacus purpureus; for it has bred during two springs in my own garden. The nest is always placed about eighteen inches from the top of a spruce, and is much like that of the Greenfinch; the eggs are like those of *Carpodacus erythrinus*, but a trifle smaller, of a pale blue, with small black spots. I saw several pairs of this bird in which both male and female were in the same brown plumage, and numerous fights there were between the red and the brown males, on their first arrival, for the possession of the females. At last the division was arranged and the nests were built. The song of this species is very pretty.

Many authors describe the red plumage as the adult one, and it is evidently the only adult one with which they are acquainted. But it is really only the *adolescent* plumage, and is put on after the young bird's *first autumnal moult*; for I saw a good many red *Linota linaria* in November and December. This red plumage becomes brighter as the extreme tips of the feathers wear away, and is at its reddest in May and June.

Speaking of *Phylloscopus lugubris*, 'Catalogue of Birds in the British Museum,' vol. v. page 48, Mr. Seebohm says, "This species is very closely allied to the preceding, being absolutely identical in colour and in its seasonal changes of plumage, and would scarcely be entitled to specific rank were it not that it appears to have a more eastern geographical range." The preceding species referred to is *P. magnirostris*; but this bird is much larger, with a longer wing, larger bill, and is not nearly so dusky about the head and shoulders as *P. lugubris*. Then the *two voices*, i. e. call-notes &c., with which I am well acquainted, are as distinct as "chalk and cheese." I know the *song* of *P. magnirostris*, which breeds in the North-west Himalayan region; the other bird is not known to breed within Indian limits. There are other species of *Phylloscopus* much more closely allied than the above two, which Mr. Seebohm would apparently like to unite. Blyth, however, rightly distinguished them. *P. lugubris* is very common about Calcutta; but I never got *one* even at Dinapore, which is only about 400 miles north of the former place. Nothing irritates me so much as to see a good species recklessly attacked. Now the two of all others most closely allied are *Phylloscopus tristis* and my *P. scindianus*. Here you have the larger first primary of the latter, and the pale tinge of yellow on the ridge of the wing and axillaries, against the bright sulphur-yellow of the same parts in *P. tristis*. The greenish edgings to the lesser wing-coverts and to the outer webs of the rectrices are hardly observable or actually wanting in *P. scindianus*. Mr. Seebohm may unite them if he likes; but the two have voices as different as could be wished. *P. tristis* has not a loud "tis-yip," or Willow-Wren-like call, which *P. scindianus* has. Both species inhabit the same tamarisk-jungles.

Reguloides superciliosus and *R. humii* are much alike; but besides the differences of plumage and geographical distribution, have widely different voices—a "weest," as Mr. Seebohm aptly expresses it, in the one case, and a fine, loud, rather shrill "tis-yip" in the other case. "Tis-yip" is Blyth's expression.

"AQUILA IMPERIALIS. The western form of the Imperial Eagle is somewhat rare near Astrakhan" (Ibis, 1882, p. 205). Mr. Seebohm must mean the *eastern* form. I do not believe the Spanish bird occurs at Astrakhan. But here Mr. Seebohm appears to ignore Mr. Dresser's work in separating two very distinct species of *Aquila*. Considering that *A. imperialis* [*A. heliaca*, Sav.] in first plumage is a striated bird, while *A. adalberti* at the same age is a plain tawny unstreaked bird, I do not at all see how one can be a "form" of the other. Could Mr. Seebohm say which is the "*form*" and which the *original*? Then we have the different distribution of white, one having it on the bend of the wing, which the other never has. What is a "form"? If "subspecies" be meant, which is the original? and will our most learned ornithologist, whoever he may be, swear that one bird was evolved from the other? There would be the danger of putting the cart before the horse, to say the least, and of thereby giving honour to the wrong bird as being the most ancient. My friend Dr. Jerdon laboured hard one day to convince me that we were derived from monkeys; but had I taken up the position that the monkey was a degenerate man, I should have had rather the best of the argument. Both positions are highly absurd, but the latter the least so. I think, in regard to "subspecies," we should not go beyond facts. Speculation that one species is derived from another is hurtful to our science. The closely allied species are the great charm of ornithology.

"AQUILA NÆVIA. The Lesser Spotted Eagle passes through the valley of the Lower Volga on migration in spring and autumn" (ibid.). I thought it was a settled thing that *nævia* was too indefinite a term to be used. Mr. Dresser contends that *pomarina* of Brehm is the applicable name, but in his 'Birds of Europe' he withholds the evidence. Brehm's original description, if there be a published one, should have been given *in extenso*; and if there be no such description closely fitting the *young* bird, my name ought to stand, for I defined the species very clearly.

SYLVIA AFFINIS, Ibis, 1882, p. 212. "The Siberian form of the Lesser Whitethroat." No! The Siberian and Indian bird is the original form! There are a hundred times as many *S. affinis* as there are *S. garrula*. But why confound them?

CETTIA SERICEA, Ibis, 1882, p. 213. I closely compared the two species and they are quite distinct. Hume's first published name was not *C. stoliczkæ*.

"LINOTA LINARIA. The Brown Linnet," Ibis, 1882, p. 218. Is *Linota canabina* the species intended? for that is the Brown Linnet.

ÆGIALITIS CURONICA, Ibis, 1882, p. 222. Mr. Dresser confounds *Æ. curonica* and *Æ. minuta* of Pallas. Of the latter Dr. Jerdon says, "Very similar to the last (*Æ. curonica*), but smaller altogether, and with proportionally much smaller legs and feet. The upper plumage is of a somewhat darker shade; the quills are also blacker; the lateral tail-feathers have more white; the base of the lower mandible is more yellow, and the tertials are less lengthened" ('Birds of India,' vol. iii. p. 641).

I agree with Dr. Jerdon as to the distinctness of the two. I have taken eggs of both—of *Æ. curonica* in Cashmere and of *Æ. minuta* in the plains of India. The eggs of the latter are smaller. In the immature dress the two species contrast strongly, and by the different size and colour of the legs I could readily distinguish them. *Æ. minuta* breeds pretty far south; I took nests at Patna. But *Æ. curonica* goes north to breed, and I did not find it breeding at all in the places that *Æ. minuta* frequented; I only got it in the plains of India after the breeding-season was over, except when I met it during the breeding-season in Cashmere.

Good work has not been done in confounding these two little Plovers.

Falco atriceps, Ibis, 1882, p. 291. Two species are confounded under this term, one with a very red breast and the other with a white one. Sharpe describes the latter, 'Catalogue Birds B. M.' vol. i. pp. 378, 379, and Hume, in 'Rough Notes,' pp. 61, 62, describes the "chestnut"-breasted one. If the white-breasted one be not *F. barbarus* (and I do not think it is), it requires a name. It is far too small for *F. peregrinus*, with which Mr. Sharpe confounds it.

Milvus govinda, Sykes. Ornithologists persist in applying this term to the Lesser Indian Kite. Sykes's description, "26 inches long," can only apply to *M. melanotis*, as the other bird never reaches that size. As one of the types is an immature example of *M. melanotis*, and the description fits the same species, Sykes's term *must* be used for the large Kite, for it is the prior one. *M. melanotis* should be reduced to a synonym. The accident of a small Kite standing in the same case with the large *M. govinda* does not give the lesser bird a title to the original description. I contend that Sykes described a large 26-inch Kite, and that it is his *govinda*, even though he did not know that the lesser bird was a distinct species. Mr. Sharpe, in the Catalogue, has misnamed the two species. Messrs. Hume and Gurney contend for a third species of Kite, intermediate between *M. affinis* and *M. govinda* (*melanotis*). All I know is, that the same little sooty-brown Kite seen at Calcutta is also found in Scind. The fact is, that the younger birds are more mottled with white, and that uniformity of dark colour is entirely due to age. The large Kite, *M. govinda* (I will not call it *M. melanotis*, for it has no right to the name), varies greatly in size and in the amount of white on the under surface of the primaries; so does *M. affinis*; it varies in size and colour still more. I have had more of the lesser Kite through my hands than any one else, for I shot them plentifully in many widely distant parts of India, and I cannot see that there is a third species. Once Mr. Anderson and I considered that we had got a third, which we named *palustris*, but we afterwards agreed that the name should be quashed. Well, let those who are very anxious for a third species have their own way, for I have long ago found it impossible to convince them; but at any rate do not let the utterly inexcusable error of calling the lesser Indian Kite "*govinda*" be persisted in. I am afraid, however, that Messrs. Gurney, Hume, and Sharpe are too old in the error to be now extricated.

CERTHIA SCANDULACA, Pallas. "It may be described as a pale or arctic form of our Creeper, and is probably identical with the northern form found on the American continent. Its southern limit in Central Asia appears to be Kashmir, where it has received the name of *C. mandellii*" (Seebohm in Ibis, 1882, p. 422).

Mr. Seebohm is mistaken. *C. mandellii* is a Sikhim bird. He probably means *C. hodgsoni*, my Cashmere species. The American species is very like it, and may prove to be identical. I have written to Mr. Hume on this very point, asking for the loan of a specimen or two for comparison. Whether identical with the American bird or not, it is a good species, quite distinct from *C. familiaris*.

Milton West, Ontario, Canada,
29th February, 1884.

P.S.—MOTACILLA FLAVA. "And are therefore of var. *taivanus*" (Seebohm in Ibis, 1884, p. 39). *Budytes taivanus*, Swinhoe, is the most perfectly distinct of all Wagtails. It differs even structurally, having a longer and stronger bill, also longer and stronger legs and feet. The coloration is unique. If it be not a thoroughly good species, then there is not such a thing as a good species.

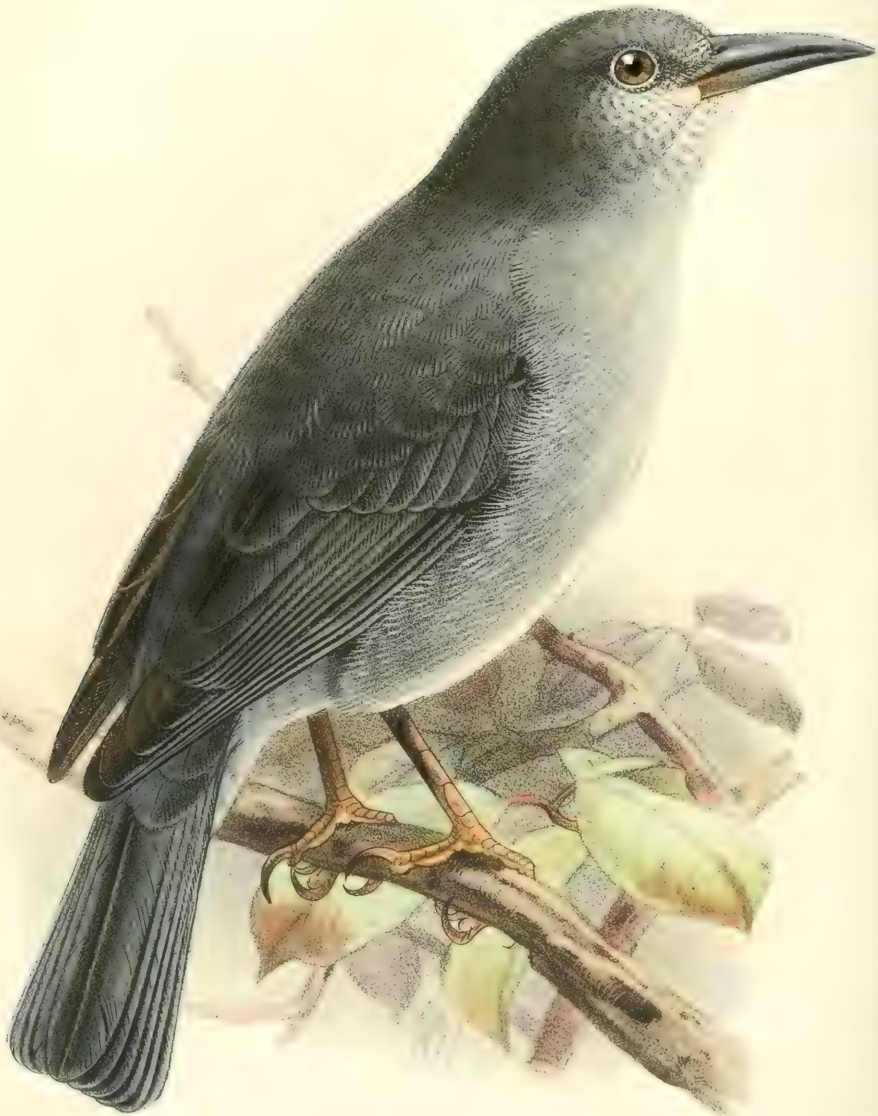
XXVII.—*Remarks on two rare American Oscines.*

By P. L. SCLATER, M.A., Ph.D., F.R.S.

(Plate VII.)

As mentioned in my last article on the Icteridæ (Ibis, 1884, p. 167), the authorities of the U.S. National Museum have kindly sent to me for inspection the type of *Idiopsar brachyurus* of Cassin. From the same obliging correspondents Mr. Salvin has obtained the loan of the only two known specimens of *Acanthidops bairdi* of Ridgway. I venture to offer a few remarks upon these two rare and little-known species.

Idiopsar brachyurus (Cassin, Pr. Ac. Nat. Sc. Phil. 1866, p. 414) is one of the most singular South-American types I have seen for a long while. Although the wings of the unique specimen are in process of moult, their structure and that of the feet show that it is a nine-primaried Oscine. But I have much doubt whether it is best referred to the Icteridæ, as Cassin has proposed. The square tail and cast of plumage remind one more of some of the Fringillidæ of the genus *Phrygilus*, especially *Phrygilus unicolor*, which in style of plumage it closely resembles. The bill is certainly *very* abnormal for a Fringilline bird, but hardly more divergent from the ordinary Fringilline structure than that organ is in the case of such types as *Catamblyrhynchus*, *Piezorhina*, and *Xenospingus*. On the other hand I can find no bill among the Icterines nearly similar to that of *Idiopsar*, and in plumage



J. G. Keulemans del. et lith.

Hanhart imp.

[illegible]OPSAR BRACHYURUS

no species at all resembling it. The only remaining group with which it would be possible to associate *Idiopsar* is the Cœrebidæ. But I can see no satisfactory resting-place for it here. On the whole therefore I should be disposed to place *Idiopsar* among the Fringillidæ, unless it is preferable to make it the type of a separate family.

Mr. Keulemans's drawing (Plate VII.) will, I trust, serve to render this obscure form better known, and perhaps help to induce some one to send us home further specimens. The type was procured in La Paz, Bolivia, by Mr. D. K. Carter.

Of *Acanthidops bairdi,* Ridgway, Proc. U.S. Nat. Mus. 1881, p. 336, two specimens are now before me—the original type, from the Volcano of Irazu, Costa Rica, obtained by J. Cooper in 1880, marked "♀," and a second specimen from the same locality obtained by the same collector in 1883, marked "♂." The plumage scarcely differs in the two sexes, but the male is rather larger in dimensions. As regards the position of this bird in the series, I trust Mr. Ridgway will excuse me if I venture to differ from him. He has described it very accurately, and I have nothing to add to his characters; but in my opinion the collector, who is stated to have referred it to the Fringillidæ, was correct in so doing.

In the first place the primaries are, I think I may confidently say, nine in number, the outermost being but slightly shorter than the next three following. This at once removes it from the Tracheophones, in which a tenth primary is always present, and shows that it is a nine-primaried Oscine. It is quite true that the division of the anterior face of the tarsus into distinct plates would primarily militate against this position; but the same structure is to be found in other true Oscines (such as *Mimus* and *Thryothorus*), and cannot negative the verdict of the nine primaries. I should therefore propose to place *Acanthidops* near *Chrysomitris* in the family Fringillidæ.

XXVIII.—*On the Birds of Northern Tibet.*

By Col. N. PRZEWALSKI*.

In the class of Birds Northern Tibet is still poorer than in mammals, as among the former in no single case is the poverty of species made up for by an unusual number of individuals. Altogether we met with only 51 species of birds in Tibet, as shown in the following table:—

	Residents.	Passing migrants.	Winter visitants.
Accipitres	7	9	3
Passeres	9	9	..
Columbæ	1	..	..
Gallinæ	2	..	..
Grallatores	..	6	..
Natatores	..	5	..
	19	29	3

To this list we might be justified in adding 15 other species, which we met with on the mountains of Burchan-Buba, Goschili, Tolai, and Torai, in the ranges bordering upon Zaidam. Of these last-mentioned 15, 6 were residents, 2 passing migrants, and 7 winter visitants. We pursued our ornithological investigations in Northern Tibet only in autumn and winter, and therefore cannot speak of the species that arrive in the spring and breed there; but in all probability the number of such species is insignificant.

The most prominent representatives of the bird-fauna of Northern Tibet are the Vultures (*Gypaetus barbatus, Vultur monachus, Gyps himalayensis*), Ravens (*Corvus corax*), Choughs (*Fregilus graculus*), Tibetan Larks (*Melanocorypha maxima*), Mountain-Finches (*Onychospiza taczanowskii, Pyrrhulauda ruficollis, P. barbata*), and *Podoces humilis*. Of the Pigeon family only one species—the Rock-Dove (*Co-*

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* [Translated from an article in Petermann's 'Mittheilungen,' Heft i. 1884. It is much to be regretted that no English account has yet appeared of Col. Przewalski's third great journey in Central Asia (1879–80). A chart of his route is given in Petermann's 'Mittheilungen,' 1883, Heft viii. As that of the only naturalist who has penetrated into Tibet from the north, his account of its bird-life cannot fail to be of interest to our readers.—EDD.]

lumba rupestris)—is found; the Gallinaceous birds are represented by two species, the Tibetan Giant Partridge (*Megaloperdix tibetanus*) and the Tibetan Three-toed Sand-Grouse (*Syrrhaptes tibetanus*), and of the Waders and Swimmers we only saw a few autumnal migrants on passage.

This poverty of the ornis is easily explained by the extreme unfitness of the physical and geographical features of the country for bird-life. There are neither trees nor bushes upon the seeds of which birds could feed and in which they could nest; the mostly saline lakes have no fish; the banks of the rivers are uniformly open and bare; and the mountains have few rocks for the alpine birds to resort to. No wonder therefore that over the great expanse which we traversed we found only nineteen species of resident birds, and the list would hardly be doubled if the whole remaining portion of Northern Tibet westwards to the Karakorum were explored. Even the migrants hasten to traverse Northern Tibet without halting, and only a few Raptores linger a little time in the autumn, allured by the numberless Pikas (*Lagomys ladacensis*), which offer them a ready sustenance. But even this circumstance, which usually plays an important part in the selection of a winter home, cannot induce our Raptores to stay through the winter; for the greater number of them hasten further south to the Brahmaputra valley, or perhaps even across the Himalayas. Only three species remain, *Archibuteo aquilinus*, *A. strophiatus*, and *Falco sacer*, and of these, too, but a very restricted number of individuals.

Large Waders, such as Cranes (*Grus cinerea* and *G. virgo*), traverse Northern Tibet in enormous flocks in autumn without halting; at the same season water-fowl also pass over. The Passeres, especially those that frequent woods, apparently perform the transit by some more eastern route and avoid the high ranges. During the whole of the later autumn (after Sept. 20th) we saw only twenty-nine species of Passeres. In spring the migration is, most probably, still more reduced in numbers, because the spring season is still more inclement than the autumn. In summer certainly only the resident species and a few desert and mountain birds nest in Northern Tibet.

The mountain-edge of the Tibetan plateau bordering on Zaidam affords more attractive ground for wintering and, indeed, for residence. On their northern outliers, which are developed into a grand Alp-like chain, amongst the deep gullies, the banks of which are clothed with dense thickets of *Myricaria*, and here and there open into very presentable little meadows—amongst these more endurable retreats some of the resident and wintering species which are not met with on the highlands find a friendly asylum. Of the resident birds the commonest are the Wall-creeper (*Tichodroma muraria*), the Brown Accentor (*Accentor fulvescens*), the Mountain-Partridge (*Caccabis magna*); and of the winter visitants the Mountain-Finches (*Leucosticte hæmatopygia* and *Montifringilla adamsi*), which collect together in enormous flocks, and the Solitary Snipe (*Scolopax solitaria*), which is found solitary near the water-springs.

XXIX.—*Notes on Woodpeckers.*—No. VIII. *On the Genus* Hemicercus. By Edward Hargitt, F.Z.S.

Perhaps in no genus of Woodpeckers has there been so much confusion as in *Hemicercus*, owing partly to the various stages of plumage through which *H. sordidus* and *H. concretus* pass, and also to the careless determination of the sexes, to which the specimens of *H. canente* and *H. cordatus* have been subject. The researches of later years have, I think, settled the latter vexed question beyond all doubt; and the large series of specimens of *H. sordidus* which has been at my disposal has enabled me to offer, as I trust, a satisfactory solution of a difficulty which has been present for many years to students of the Malayan avifauna.

Three ornithologists of note have written on the latter subject. First of all, Count Salvadori, who recognizes the four following species of the present genus as inhabiting the Indo-Malayan region:—

1. *H. concretus* (Temm.). This I take to be the young male of the true *H. concretus.*

2. *H. hartlaubi* (Malh.). In my opinion the adult male of *H. concretus.*

3. *H. sordidus* (Eyton). Apparently the adult male of Eyton's species.

4. *H. brookeanus* (Salvad.). Apparently nothing more than *H. sordidus* in the yellow-coloured plumage found in freshly moulted birds of the present genus.

Lord Tweeddale (Ibis, 1877, p. 291) describes what he considers to be the various stages of plumage of *H. sordidus,* and adds, "The adult male of *H. concretus* (Reinw.), ex Java (Pl. Col. 90. fig. 1), differs from *H. sordidus* by having the entire crest crimson, although not of so dark a shade as in *H. sordidus.* The occurrence of this species beyond Java rests on no good authority. It is figured by Malherbe (Monogr. Picid. pl. xli. fig. 5), under the title of *Micropicus hartlaubi.*" Lord Tweeddale further remarks that in examples sent by Mr. Buxton from Lampong, S.E. Sumatra, the females are undistinguishable from Javan *P. concretus* ♀ and Malaccan examples in the plumage of the female, and that the adult male is identical with adult males from Malacca. In all of the above remarks I thoroughly concur, and I may state that there appears to be no distinguishing character between the females of *H. concretus* and *H. sordidus.*

Mr. Sharpe (Ibis, 1879, p. 240) enumerates the four species recognized by Count Salvadori (Ucc. Born. p. 46), and considers *H. brookeanus* to be a yellow-stained example of *H. sordidus.* He further states that *H. sordidus* will have to bear the name of *H. concretus,* and regards the entirely red crest in *H. hartlaubi* as a good specific character, and gives as the habitat, Malacca (*Gould*), Java (*Wallace*), Sumatra (*Temminck*), Borneo (*Mus. Turati*); but he regards the last locality as perhaps doubtful. Mr. Sharpe further adds that he would not be surprised if *H. hartlaubi* turned out to be a very old full-plumaged *H. sordidus.* *H. concretus,* he says, is founded on a young bird, whose progress towards maturity he has traced by means of the specimens in the British Museum. Mr. Sharpe's ideas on the species are, as usual, good; but he has unfortunately confused the subject by the names which he has adopted. *H. brookeanus* is, as he was the first to point out, either an abnormally coloured example of *H. sordidus*, or, more probably, a newly moulted bird of that species. In stating that *H. sordidus* and *H. concretus* are synonymous he falls into an error, because, as it turns out, the Javan bird is a well-marked species, and the Malaccan, Sumatran, and Bornean birds belong to another equally well-marked species. The latter must bear the name of *H. sordidus* of Eyton, founded on Malaccan examples of the young male and adult female; while that of *H. concretus*, also bestowed on a young male and adult female, was founded on specimens from Java, and must be applied to the species from this island only.

Key to the Species.

a. With the top of the head red or with a red crest.	
*a*¹. Forehead and crown red.	
*a*². Forehead and crown vermilion-red; occipital crest olive-grey	*sordidus*, ♂ ad.
*b*². Forehead and crown, as well as entire crest, scarlet	*concretus*, ♂ ad.
*b*¹. Forehead and crown rufous buff.	
*c*². Occipital crest orange-red, varied and transversely spotted with dusky	*sordidus*, juv.
*d*². Occipital crest uniform bright flame-red	*concretus*, juv.
b. With no red on the head.	
*c*¹. Forehead and crown of the same colour as the crest, and uniform or minutely spotted.	
*e*². Forehead, crown, and crest olive-grey	*sordidus*, ♀ ad. *concretus*, ♀ ad.
*f*². Top of the head, as well as the crest, black, the forehead and crown minutely speckled with white	*canente*, ♂ ad. *cordatus*, ♂ ad.
*d*¹. With a frontal patch of buffy white or dingy buff.	
*g*². Forehead and crown buffy white, occipital crest black	*canente*, ♀ ad. *cordatus*, ♀ ad.
*h*². Forehead and crown dingy buff, occipital crest black	*canente*, juv. *cordatus*, juv.

1. HEMICERCUS SORDIDUS.

Picus concretus (pt.), Wagl. Syst. Av. *Picus,* sp. 70 (1827).

Dendropicus sordidus, Eyton, Ann. & Mag. Nat. Hist. xvi. p. 229 (1845).

Hemicercus concretus (nec Temm.), Blyth, J. A. S. B. 1845, p. 195; id. Cat Mus. As. Soc. p. 54 (1849); Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 650 (1856–58); Jerd. B. Ind. i. p. 281 (1862); Gray, List Picid. Brit. Mus. p. 70 (1868); Salvad. Ucc. Born. p. 47 (1874).

Hemicercus concretus (pt.), Bp. Consp. Gen. Av. i. p. 129 (1850); id. Consp. Volucr. Zygod. p. 9 (1854); Gray, Hand-l. B. ii. p. 190, no. 8667 (1870).

Hemicercus coccometopus, Reichenb. Handb. Scans. Picinæ, p. 401, pl. dclvi. figs. 4364, 4365, ♂, ♀ ad. (1854); Sclat. P. Z. S. 1863, p. 211; Blyth, Ibis, 1866, p. 354 (note).

Hemicercus sordidus, Blyth, J. A. S. B. 1855, p. 272; Cab. & Heine, Mus. Hein. iv. p. 177 (1863); Gray, List Picid. Brit. Mus. p. 70 (1868); id. Hand-l. B. ii. p. 190, no. 8666 (1870); Salvad. Ucc. Born. p. 46 (1874); Tweedd. Ibis, 1877, p. 291; Hume & Davison, Str. F. 1878, p. 128; Hume, op. cit. 1879, p. 52; Sharpe, Ibis, 1879, p. 240; Salvad. Ann. Mus. Civ. Genov. xiv. p. 181 (1879); Kelham, Ibis, 1881, p. 338; Salvin, Cat. Strickl. Coll. p. 401 (1882).

Micropicus concretus (pt.), Malh. Monogr. Picid. i. p. 187, pl. xli. fig. 2, ♂ juv. (1861).

Picus sordidus, Sundev. Consp. Av. Picin. p. 10 (1866); Giebel, Thes. Orn. p. 180 (1876).

Hemicercus brookeanus, Salvad. Ucc. Born. p. 44 (1874).

Adult male. Upper and middle back, likewise the scapularies, black, each feather margined with and crossed by a bar of yellowish white, the black forming two large spots more or less rounded; wing-coverts black, margined with yellowish white; edge of wing yellowish white; bastard-wing and primary-coverts black, the latter tipped with whitish; quills black, the inner webs of the primaries margined with yellowish white at the base, this colour increasing in extent upon each inner feather, the innermost secondaries being margined and deeply indented or barred with yellowish white, the black forming large and conspicuous spots, the terminal one being more or less heart-shaped; shafts black; lower back olive-grey, some of the feathers being tipped with whitish; rump and upper series of upper tail-coverts uniform yellowish white, the lower series of these coverts black, with whitish tips; tail black, the inner webs of the feathers having a whitish spot, the outer large one having also a transverse spot on the outer web; dwarf feather broadly margined and barred with yellowish white, the black forming two large spots; shafts black; forehead and crown crimson; hind neck whitish; occipital crest, lores, sides of the face and neck, chin, throat, and under surface of the body olive-grey, a faint yellowish-white stripe from under the ear-coverts running down the side of the neck, the abdominal feathers having yellowish tips; the feathers of the thighs black, margined with yellowish; under tail-coverts black at the base, the tips being yellowish white; under wing-coverts yellowish white. Total length 5·5 inches, culmen 0·85, wing 3·35, tail 1·0, tarsus 0·65; toes (without claws)—outer anterior 0·52, outer posterior 0·52, inner anterior 0·4, inner posterior 0·28.

Young male. Differs from the adult in having the forehead and crown rufous buff, the occipital feathers more or less washed with flame-red, and having dusky tips; nape very similar in colour to the crown; sides of the face and neck, also the entire under surface of the body, dusky, without any olive tinge, the feathers of the breast and abdomen having pale brownish tips; under wing-coverts buffy white.

The still younger male has the hind part of the crown covered with transverse dusky markings, and the outermost feathers of the occipital crest much more varied with dusky, this colour forming a central stripe, the red feathers of the crest having also dusky tips.

Nestling male. Having the forehead, crown, and occipital crest dingy rufous buff, the feathers having dusky tips, and with only a slight trace of red on the occipital crest.

Adult female. Differs from the adult male in having the entire top of the head, as well as the occipital crest, slaty grey, the latter having a slight olive tinge. Total length 5·0 inches, culmen 0·75, wing 3·3, tail 1·0, tarsus 0·6.

Young female. Having the forehead and crown rufous buff, the occipital crest slightly more rufous, the feathers of the latter with dusky tips.

I subjoin a short description of the various stages of plumage through which this species passes, from the nestling to the adult, as far as the series of specimens examined will permit; and without asserting that the links in the chain are complete, I think most of the changes of plumage are enumerated in these notes.

1*st stage.—Male, nestling.* Forehead, crown, and crest rufous buff, the latter with only a trace of flame-red, and varied with dusky, as well as having dusky tips to the feathers, those of the forehead and crown having their tips alone dusky.

2*nd stage.*—Forehead and crown rufous buff, the feathers having dusky tips, a few red feathers appearing on the crown; the crest a mixture of flame-red and rufous buff, the feathers having dusky tips.

3*rd stage.*—Forehead and crown as in the latter stage, with numerous red feathers appearing; crest olive-grey mixed with reddish buff.

4*th stage.*—Forehead and crown vermilion-red; crest olive-grey, barred with dull buff.

5*th stage.*—Forehead and crown vermilion-red, the hinder feathers of the crown elongated; occipital crest olive-grey. This is the fully adult male.

1*st stage?—Female, young.* Forehead and crown pale rufous buff, the crest more rufous, the feathers of the latter having dusky tips. This is the first stage of plumage in which I have seen the female; but there is very probably an earlier one, in which the feathers of the forehead and crown will have dusky tips.

2*nd stage.*—Forehead, crown, and crest olive-grey, some of the feathers of the crest being barred with buffy whitish.

3*rd stage.*—Forehead, crown, and crest entirely olive-grey. This is the fully adult female.

This species has an extensive range. In Tenasserim, according to Messrs. Hume and Davison, it is only a straggler in the extreme south of the province, the latter gentleman having only procured it at Bankasoon. It ranges through the Malayan peninsula, and is found in Sumatra, Bangka, and Borneo. A bird from the latter island has, however, been separated by Count Salvadori as *H. brookeanus*; but I cannot find any specific differences between any of the Bornean birds and specimens from the other localities above mentioned*.

2. Hemicercus concretus.

Picus concretus, Temm. Pl. Col. pl. xc. figs. 1, 2 (1824); Steph. Gen. Zool. xiv. p. 160 (1826); Wagl. (pt.) Syst. Av. Picus, sp. 70 (1827); Less. Traité, p. 221 (1831); Sundev. Consp. Av. Picin. p. 11, no 26 *b* (1866); Giebel, Thes. Orn. p. 151 (1876).

Hemicercus concretus, Swains. Classif. B. ii. p. 306 (1837); Gray, List Gen. p. 54 (1840); id. List Gen. 1841, p. 70; id. Gen. B. ii. p. 437 (1845); Bp. (pt.) Consp. Gen. Av. i. p. 129 (1850); id. Consp. Volucr. Zygod. p. 9 (1854); Reichenb. Handb. Scans. Picinæ, p. 401, pl. dclvi. figs. 4361–63 (juv.) (1854); Blyth, Ibis, 1866, p. 354; Cab. & Heine (pt.), Mus. Hein. iv. p. 178 (1863); Gray (pt.), Hand-l. B. ii. p. 190, no. 8667 (1870); Gould, B. Asia, vi. pl. xix. figs. ♂ juv. and ♀ ad. (1876).

Micropicos concretus, Malh. N. Classif. Mém. Acad. Metz, 1848–49, p. 331.

Micropicus concretus, Malh. Monogr. Picid. i. p. 187, pl. xli. fig. 1 ♂ juv., fig. 3 ♀ ad. (1861).

Micropicus hartlaubi, Malh. Monogr. Picid. i. p. 189, pl. xli. fig. 5 ♂ ad., fig. 6 ♀ juv. (1861).

Hemicercus hartlaubi, Gould, B. Asia, figs. ♂ ad. and ♀ ad. (1876).

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* Reichenbach briefly describes a bird under the title of *Meiglyptes sordidus*, and gives as its habitat Tenasserim. I am unable (as was Malherbe) even to say to what genus this bird should be referred, the description being insufficient to assign it to any known species.

Adult male. Upper back and scapularies black, the feathers margined with buffy white, and showing a large heart-shaped black spot, the concealed portion being barred with white; lower back purplish slate, the feathers margined with buffy white; bastard-wing and primary-coverts black, tipped with buffy white; edge of wing buffy white; quills black, inner webs of the primaries margined with white on their basal half, outer webs of secondaries spotted with white, the inner webs being margined along their whole length with the same, the innermost barred and tipped with buffy white, the black bars being very broad and forming a large spot at the tip; shafts black; rump buffy white; upper tail-coverts black, tipped with buffy white; tail black, the dwarf feather tipped with buffy white; shafts black; nasal plumes olive-grey; forehead, crown, and entire crest brilliant scarlet; hind neck buffy white; lores, entire sides of the face and neck, also from the chin to the vent (inclusive), olive-grey, less olive on the chin and throat; an indication of a white stripe down the side of the neck; thigh-feathers black, margined with dull buffy white, the black forming a large heart-shaped spot at the tip; the feathers of the abdomen and flanks tipped with dull buffy white; under tail-coverts black, with whitish tips; under wing-coverts buffy white. Total length 5·5 inches, culmen 0·8, wing 3·35, tail 1·15, tarsus 0·65; toes (without claws)—outer anterior 0·6, outer posterior 0·65, inner anterior 0·4, inner posterior 0·28.

Young male. Differs from the adult male in having the forehead and crown bright rufous buff; the entire crest bright flame-red; hind neck dull buffy white; the feathers of the underparts tipped with greyish white; the buffy-white stripe down the side of the neck well marked; the feathers of the upper back, the wing-coverts, and inner quills having more white upon them; dwarf tail-feather broadly tipped with pure white; the two next inner feathers, on either side, also tipped with white; the feathers of the lower back broadly tipped with buffy white.

Adult female. Differs from the adult male in having the forehead, crown, and entire crest olive-grey. Total length 5·2 inches, culmen 0·8, wing 3·35, tail 1·2; tarsus 0·65.

This being a rare species in collections, I have only had an opportunity of examining the specimens contained in the British and Leiden Museums, and cannot give all the stages of plumage through which the species passes. I therefore append those at present known to me.

Male, young. Forehead and crown bright rufous buff; occipital and nuchal crest bright flame-red.

Male, adult. Forehead, crown, and entire crest scarlet.

Female, adult. Forehead, crown, and crest olive-grey, and resembling the adult female of *H. sordidus.*

The present species is confined to the Island of Java. Other localities have been assigned to it, but in the large series of specimens of *Hemicercus* from other localities which I have examined in the collections of the British and Leiden Museums, in that of Capt. Wardlaw Ramsay, as well as in my own cabinet, I have not seen a bird that could be mistaken for the present species, the red crown and crest of the adult male, and the uniform brilliant flame-coloured crest of the young, clearly distinguishing it from *H. sordidus.*

3. HEMICERCUS CANENTE.

Picus canente, Less. Cent. Zool. p. 215, pl. lxxiii. (1830) ♂; id. Bélang. Voy. iii. p. 240 (1834) ♂; id. Compl. Buff. ix. p. 305 (1837); Giebel, Thes. Orn. p. 146 (1876).

Hemicercus canente, Gray, Gen. B. ii. p. 437 (1845); Blyth, J. A. S. B. xv. p. 282 (1846); id. Cat. B. Mus. As. Soc. p. 54 (1849); Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 650 (1856–58); Jerd. (pt.) B. Ind. i. p. 280 (1862); Blyth, J. A. S. B. 1863, p. 75; Cab. & Heine, Mus. Hein. iv. p. 176 (1863); Blyth, Ibis, 1866, pp. 349–354; Gray, List. Picid. Brit. Mus. p. 71 (1868); id. Hand-l. B. ii. p. 190, no. 8668 (1870); Blyth, Ibis, 1870, p. 169; Blanford, t. c. p. 464; Elwes, t. c. p. 527; Hume & Davison, Str. F. 1874, p. 471; id. & Oates, op. cit. 1875, pp. 14, 60; Blyth & Wald. B. Burm. 1875, p. 74; Wald. Ibis, 1876, p. 344; Hume, Str.

F. 1877, p. 25; id. & Davison, op. cit. 1878, vi. pp. 127, 500; Hume, op. cit. 1880, p. 112; Bingham, t. c. p. 161; Oates, op. cit. 1882, p. 190; id. B. Brit. Burm. ii. p. 30 (1883).

Micropicos canente, Malh. N. Classif. Mém. Acad. Metz, 1848–49, p. 331.

Hemicercus canens, Bp. Consp. Gen. Av. i. p. 129 (1850); id. Consp. Volucr. Zygod. p. 9 (1854); Reichenb. Handb. Scans. Picinæ, p. 401, pl. dclvi. figs. ♂ ♀ ad. 4366, 4367 (1854).

Micropicus canente (pt.), Malh. Monogr. Picid. i. p. 190, pl. xlii. figs. 1, 2 (1861).

Picus canente, var. *orientalis,* Sundev. Consp. Av. Picin. p. 11 (1866).

Adult male. Back and scapularies black, with a broad stripe of buffy yellowish white running down the middle of the interscapular region; a broad shoulder-patch extending the whole length of the forearm pale buff, as are likewise the innermost quill-feathers, these, as well as the lower lesser wing-coverts, having a large heart-shaped spot of black near the tip; median and greater wing-coverts black, their basal portion, also the margin at the tip, being buffy white or pale buff, a conspicuous patch of this colour on the edge of the wing; bastard-wing and primary-coverts black; quills and their shafts black; rump pale buff, the lower feathers barred with black at the tip; upper tail-coverts, tail, and tail-shafts black; nasal plumes, lores, face, entire crown, as well as the occipital crest and nape black, the lores and sinciput minutely spotted with white; chin and throat dull buffy or yellowish white, running into greenish dusky on the fore neck; a stripe of clear pale buff from the lower mandible extending down the side of the neck as far as the chest, some of the inner feathers on the side of the chest having a large spot of black; outside the light stripe on the side of the chest a conspicuous tuft of black feathers; from the chest to the vent, inclusive, dusky green, rather blacker on the flanks, thighs, and vent; under tail-coverts greenish black; under wing-coverts and axillaries pale buff, with a slight tinge of yellow; "legs and feet dark greenish horny, dark greenish

plumbeous, or very dark sap-green, often appearing all but black; the claws blackish plumbeous or black; bill black; irides dark brown or dark reddish brown" (*Hume & Oates*). Total length 6·8 inches, culmen 1·05, wing 3·85, tail 1·4, tarsus 0·78; toes (without claws)—outer anterior 0·65, outer posterior 0·72, inner anterior 0·45, inner posterior 0·35.

Immature male. In the plumage of the adult male, but altogether more dusky in colour, especially the light portions; scapularies narrowly margined with buffy white; the chin, throat, also the stripe down the side of the neck, dirty buffy or brownish white; from the fore neck to the abdomen, inclusive, dusky brown; under wing-coverts dirty buffy white.

Young male. In the plumage of the female, but differing from the adult of this sex in being less intensely black in the dark parts of the plumage, the light portions being dingy buffy white or brownish white; the forehead and crown inclining more to buff, but none of the light parts with any tinge of yellow; the light stripe from the lower mandible, so conspicuous in the adult, scarcely perceptible; underparts dusky brown; the flanks, thighs, and under tail-coverts dull buffy white. Closely resembling the immature female (not nestling), but slightly lighter in colour.

Adult female. Differs from the adult male in having the forehead and crown pale buff; soft parts the same as in the male. Total length 6·3 inches, culmen 0·8, wing 3·85, tail 1·4, tarsus 0·7.

Immature female. Having the forehead and crown dingy pale buff; in other respects resembling the immature male.

Female, nestling. Differs from the adult female in the absence of any yellow tinge on the light portions of the plumage; shoulder-patch lighter, and the spotting upon it, as well as upon the inner quills, considerably less developed; the light tips to the median and greater wing-coverts broader; rump lighter; forehead and crown deep buff; chin and throat white; a black stripe from the lower mandible running on to the fore neck, and above this a white stripe down the neck as far as the side of the chest; from the fore neck to the under tail-coverts, inclusive, brownish black; under wing-coverts and axillaries almost pure white.

Much perplexity has existed as to the identity of the sexes of this species as well as of *H. cordatus*. Dr. Jerdon described the buffy white crown as a character of the male, and the spotted crown as a character of the female. Sundevall, as well as Cabanis and Heine, shared this view, while, on the contrary, Malherbe considered the spotted-headed bird to be the male; and this opinion was held by Colonel Tickell, who, in his MS. 'Illustrations to Indian Ornithology,' has figured the white-crowned bird as the female. Mr. Hume endorses Malherbe's opinion, and considers his views fully corroborated by the large number of specimens of which the sexes have been carefully determined by his trustworthy collectors. I was at first inclined to think that there were two species inhabiting Burmah, Tenasserim, and probably Siam (one in which both the male and female had spotted heads, and another in which both male and female had a buffy-white cap), and that two smaller races of these existed in Malabar and the peninsula of India. The different opinions held by so many learned authors seemed to justify such an idea, as I presumed that the specimens collected and examined by Dr. Jerdon and others were determined. Mr. Hume, however, than whom we can have no better authority, has examined a very large series of specimens, and he states that the bird with the spotted head is the male, and that the light-crowned bird is the female, also that the young male resembles the female in having the light crown, which disappears with age, the feathers becoming black, very minutely spotted with white at the tip, the change commencing at the extremity of the feather. Upon examining the black-headed birds, one constantly finds specimens (evidently immature) in which the bases of the feathers of the forehead and crown are white, clearly showing the change of plumage, which is not the result of a moult, but a change of colour in the feather itself, the black first appearing on the tip. I have in my collection a specimen from the Arrakan hills (*E. W. Oates*) which is a spotted-headed bird, but marked female; and Mr. Oates drew my attention to this, saying he had no reason to doubt the accuracy of the determination. While unable to account for this, I consider Mr. Hume's views on the subject to be so strongly supported by satisfactory evidence, that we may safely adopt them. The latter author, in 'Stray Feathers,' 1878, p. 127, gives the Karen hills, doubtfully, as a habitat of this species, on account of Lord Walden's note in Blyth's 'Birds of Burma,' which is as follows:—"Two males are sent by Mr. Ramsay. One has the head uniform deep black, the other with a few buff markings on the feathers of the forehead and crown;" and Mr. Hume remarks that "the description (if accurate) of a uniform head, seems to indicate a new species." I have these specimens (which are true *H. canente*) from Capt. Wardlaw Ramsay's collection before me while I write. The first-named bird is a male, and the top of the head is not uniform black, the forehead and crown being minutely speckled with white; the other example is also a male, with the forehead and crown also minutely speckled with white, but still having a few of the buffy feathers of the young stage of plumage remaining on the forehead and fore part of the crown (these being without black tips); and upon the hind portion of the crown these immature feathers have their partially exposed bases still white, the tips being black. I have in my own collection a male bird from Tenasserim Town (*Mr. Davison*) almost identical in plumage with the latter specimen.

The most northerly habitat of this species, so far as I know, is Cachar, in the north-eastern portion of which examples have been obtained by Mr. Inglis. Mr. Eugene Oates says "it occurs locally throughout British Burmah, being very abundant in some places and apparently absent in others." In his "List of Birds obtained in the Irrawadi" (Ibis, 1870, p. 464), Mr. Blanford gives Bassein as a locality, but says it is not common. Capt. Wardlaw Ramsay procured this species on the Karen hills, at from 500 to 4000 feet. Capt. Bingham observes that it is not very plentiful in the Thoungyeen jungles, but that he has seen the bird from the head-waters of the stream nearly to its mouth. Mr. Hume's collection contains specimens from the following localities:—Pahpoon, Salween river, Beeling, Thatone, Wimpong, Kaukaryit, Hongthraw river, Khyin, Meetan, Amherst, Zadee, Meeta Myo, Zadawoon, Tenasserim Town, Laynah, Pakchan, Bankasoon. Mr. Darling obtained this species at Kussoom, about 120 miles south of the southernmost point of Tenasserim; this would appear to be the extent of its range in that direction, as far as is known to us.

4. HEMICERCUS CORDATUS.

Hemicercus cordatus, Jerd. Madr. Journ. xi. p. 211 (1840); Gray, Gen. B. ii. p. 437 (1845); Jerd. Ill. Ind. Orn. pl. xl. (1847); Bp. Consp. Gen. Av. i. p. 129 (1850); Reichenb. Handb. Scans. Picinæ, p. 401, pl. dclvi. figs. 4368, 4369, ♂ ♀ ad. (1854); Cab. & Heine, Mus. Hein. iv. p. 175 (1863); Blyth, Ibis, 1866, pp. 249, 254; Gray, List Picid. Brit. Mus. p. 71 (1868); id. Hand-l. B. ii. p. 191, no. 8669 (1870); Blyth, Ibis, 1870, p. 169; Hume, Str. F. 1876, p. 389; Gould, B. Asia, vi. pl. xviii. figs. ♂ ♀ ad. (1876); Davidson & Wenden, Str. F. 1878, vii. p. 95; Butler, op. cit. 1880, p. 385; Davidson, op. cit. 1883, p. 354.

Hemicercus canente (pt.), Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 650 (1856–58).

Micropicus canente (pt.), Malh. Monogr. Picid. i. p. 190, pl. xlii. figs. 1, 2 (1861).

Hemicercus canente (non Less.), Jerd. B. Ind. i. p. 280 (1862); Salvin, Cat. Strickl. Coll. p. 401 (1882).

Picus canente, var. *occidentalis*, Sundev. Consp. Av. Picin. p. 11 (1866).

Picus cordatus, Giebel, Thes. Orn. p. 151 (1876).

Hemicirens canente, ? lapsu, Butler, Str. F. 1877, p. 503.

Adult male. Back and scapularies black, with a broad yellowish-white stripe extending from the base of the hind neck to the middle of the back; rump buffy white tinged with yellow, a few of the outer feathers tipped with black; outer wing-coverts black, narrowly margined at the tip with buffy white; a conspicuous patch of pale buff, tinged with yellow, covering nearly the whole of the forearm, crossing the wing longitudinally, and comprising the inner half of all the coverts, the median and greater series having a large heart-shaped spot of black at the tip; edge of wing yellowish white; bastard-wing and primary-coverts black; quills black, the base of the inner webs white; the inner secondaries buffy white, having at the tip a broad black bar, or upon the innermost of all a black heart-shaped spot; shafts black; upper tail-coverts, tail, and tail-shafts black; nasal plumes, forehead, crown, occipital crest, nape, and hind neck, also the upper part of the face, in a line from the nostrils to the nape, black, the forehead and crown minutely speckled with white; a stripe of pale buff (tinged with yellow) from under the eye, passing under the ear-coverts and running down the side of the neck on to the side of the chest, upon the latter region the buffy-white feathers having a large black spot at the tip; cheeks, chin, and throat pale buff, slightly tinged with yellow; fore neck, and a stripe from behind the cheeks bordering the chin and throat, greyish olive, the feathers next to the light stripe down the side of the neck being slightly varied with black; chest, breast, and abdomen dusky olive, brighter on the chest; flanks, thighs, vent, and under tail-coverts black, the feathers of the vent having an almost obsolete margin of dirty white at the extreme tip; under wing-coverts and axillaries yellowish white; underside of quill- and tail-shafts dirty whitish, the tips of the latter dusky; "bill black; legs and feet blackish, tinged with plumbeous; irides deep brown" (*W. Davidson*). Total length 5·7 inches, culmen 0·85, wing 3·7, tail 1·35, tarsus 0·7; toes (without claws)—outer anterior 0·63, outer posterior 0·72, inner anterior 0·45, inner posterior 0·32.

Adult female. Differs from the adult male in having the forehead and crown pale buff. Total length 5·5 inches, culmen 0·75, wing 3·45, tail 1·3, tarsus 0·63.

This bird is fairly entitled to rank as a subspecies and to bear the name bestowed upon it by Dr. Jerdon. Although it resembles *H. canente* in the plumage of both sexes, its very much smaller size is so conspicuous that it cannot be mistaken for the latter species. Although the measurements of the toes are nearly the same in both birds, in *H. cordatus* they are much more slender, *H. canente* having the tarsi and toes very stout.

The present species is, so far as we know, confined to the southern portion of India. Dr. Jerdon says it is found in the forests of Malabar, generally on high trees, and in pairs, both above and below the Ghâts. He also procured it in the forests in the Chanda district, South-east of Nagpore. Capt. Butler (Str. F. 1880, p. 385) observes that it is rare in the Deccan and South Mahratta country, occurring sparingly along the Sahyadri range as far north as Khandala. Mr. Laird procured it in the forests north of Belgaum and in North Kanara. Mr. Davidson (Str. F. 1883, p. 354) says that "in the Wynaad and Mysore country it is not a common bird, and found in pairs or parties sparingly distributed. It ascends the slopes of the hills to about 3000 feet."

It is included in Mr. Hume's 'List of the Birds of the Travancore Hills,' having been obtained at Mynall by M. Bourdillon.

XXX.—*On a Collection of Birds from Central China.*

By Henry Seebohm.

I am indebted to the kindness of Mr. John M. Mitchell for allowing me to examine a collection of birds made in the valley of the Yang-tse-kiang river, in Central China, by Mr. Frederick Styan. They were principally obtained near Kiukiang, 450 miles up the river, and on the Lushan range of mountains, which lie directly behind Kiukiang, at a distance of five or six miles as the crow flies. These mountains run in a south-westerly direction for twenty miles or more, and the highest peak is about 5000 feet above the level of the sea. The hills are broken and rugged, and, for the most part, covered with dense scrub nearly breast-high. The highest range is covered with long coarse grass, and a few stunted pines creep up to the summit; but up to about 2000 feet the pine-forests cover extensive areas. Mingled with the pines, but not, as a rule, extending quite so high, are large tracts of bamboos, amongst which are sprinkled magnolias, camphor-trees, camellias, laurels, azaleas, &c.

9*. BUTEO VULGARIS.

An example with very conspicuously barred thighs, and with the tarsus feathered to within an inch of the toes, may fairly claim to be considered to belong to var. *japonicus*.

13. BUTASTER INDICUS.

15. FALCO PEREGRINUS.

Kiukiang, December.

15 *a*. FALCO MELANOGENYS.

A male and female, both shot on the 18th of March at Hai San, are pronounced by Mr. J. H. Gurney to be of this species. They differ from our Peregrine, which is probably only a winter visitor to Central China, in being slightly smaller, and in having the underparts below the breast much barred and suffused with slate-grey; but the most important character is the colour of the head and nape, which are nearly black, shading into slate-grey on the mantle. This species can scarcely be more than a local race of our Peregrine, breeding in Australia, ranging northwards to Borneo and Central China and westwards to Sumatra and Java, and intermediate in appearance between our bird and the North-west Indian race, *F. atriceps*, in which the whole of the upper parts are very dark slate-grey, approaching black. Mr. Gurney informs me that the Norwich Museum possesses an example from Amoy, the most northerly locality previously known.

23. MILVUS MELANOTIS.

Four examples, large birds, showing much white at the base of the primaries below the under wing-coverts, and with little or no white on the forehead, are referable to this species, which can only be regarded as the eastern race of our Black Kite.

33. CIRCUS ÆRUGINOSUS.

An example with dark-chestnut belly, thighs, and under tail-coverts, and brown unbarred tail, is dated 30th November, and seems to prove that our Marsh-Harrier goes to China.

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* The numbers refer to Swinhoe's "Catalogue of the Birds of China," published in the 'Proceedings of the Zoological Society of London' for 1871, pp. 337–423.

34. Circus spilonotus.

A male, dated Kiukiang, 17th November, with the belly, thighs, and under tail-coverts white, with traces only of chestnut spots or shaft-lines, but with a barred tail, seems to belong unquestionably to the eastern form of the Marsh-Harrier. A female, dated a week later, has the tail more broadly barred, and the ground-colour of the underparts rufous instead of white. In both the primaries are barred.

40. Athene whitelyi.

An example dated Poyang Lake, January, seems to prove that all these Owls do not migrate south in winter.

55. Otus brachyotus.

An example, dated Kiukiang, 28th April, is rufous.

66. Hirundo gutturalis.

Kiukiang, 15th July.

77. Halcyon pileatus.

An example, bought alive.

78. Alcedo bengalensis.

Kiukiang, July and September.

82. Upupa epops.

Kiukiang, December.

106. Suya striata.

Lushan, December.

109. Cisticola schœnicola.

Kiukiang, 30th August.

112. Acrocephalus orientalis.

Wuhn, 20th October.

118. Cettia canturians.

Kiukiang, 11th April.

139. Phylloscopus proregulus.

Two examples.

145. RUTICILLA AUROREA.
Kiukiang, November.

149. XANTHOPYGIA FULIGINOSA.
Lushan, 26th March.

150. THAMNOBIA LEUCOCEPHALA.

154. TARSIGER CYANURUS.
Kiukiang, March and November.

175. PARUS MINOR.

191. MOTACILLA LEUCOPSIS.
Kiukiang, September, October, and February.

196. MOTACILLA OCULARIS.
Poyang Lake, January.

202. MOTACILLA SULPHUREA.
Lushan, 6th April.

204. HENICURUS SINENSIS.
Kiukiang, 4th November.

206. HENICURUS SCOULERI.
Kiukiang, 26th September.

206*a*. HETERURA SYLVANA.
Nankang, 15th December. This species is a very interesting addition to the birds of China. It has hitherto been found only on the Himalayas. It is a mountain Pipit, which, under the "furor genericus," has been allowed to set up a genus of its own.

208*a*. ANTHUS LUDOVICIANUS.
Poyang Lake, January. This Pipit is, no doubt, a winter visitor to Central China. It is the Nearctic form of our Alpine Pipit, *A. spinoletta*, from which it only differs in being smaller and darker. It is a common winter visitor to Japan, and was named *A. japonicus* by Temminck and Schlegel.

214. MERULA NAUMANNI.
Several skins, dated November, December, and January. Probably a winter visitor only.

215. Merula fuscata.

Skins dated from 8th November to 8th April. No doubt a winter visitor from the tundras of Eastern Siberia.

218. Merula pallida.

225. Merula mandarina.

226. Geocichla varia.

Lushan, 4th April.

232. Monticola cyanus-solitarius.

Poyang Lake, 5th December. A female of one of these two forms, or, more probably, of an intermediate form.

233. Myiophoneus cæruleus.

Lushan, 8th April.

235. Cinclus pallasi.

Kiukiang, August.

242. Pycnonotus sinensis.

Kiukiang, January, July, and November.

244. Pycnonotus xanthorrhous.

Sin Fung, January.

247. Spizixus semitorques.

Kiukiang, 2nd February.

254*a*. Pomatorhinus styani, nov. sp.

Lushan, 4th April and 8th November. The genus *Pomatorhinus* was monographed by Capt. Wardlaw Ramsay (Ibis, 1878, pp. 129–145) and afterwards by Mr. Bowdler Sharpe (Cat. Birds Brit. Mus. vii. pp. 408–432), and *P. ruficollis* has been specially investigated by Col. Godwin-Austen (Journ. As. Soc. Beng. 1876, p. 75) and by l'Abbé David and Mons. Oustalet (Ois. de la Chine, p. 186); nevertheless it appears to me that three distinct species are confused together under this name by all the writers I have named. Mr. Sharpe confesses that he accepted the verdict of these distinguished authorities against the validity of Swinhoe's species without trying the case himself; but after comparing

Mr. Styan's skins and those in the Swinhoe collection, which include examples collected by l'Abbé David in Moupin and Sechuen, with a large series from Nepal and Sikkim, he endorses my subdivision of this species into three, all of which have white throats and white margins to the feathers of the breast; but

P. ruficollis has the breast-streaks and the underparts below the breast russet-brown;

P. stridulus has the breast-streaks rich chestnut, contrasting with the russet-brown underparts below the breast; and

P. styani has the breast-streaks and the underparts below the breast olive-brown.

There is little or no difference in the colour of the upper parts (except that *P. styani* is slightly more olive (less russet) on the rump and upper tail-coverts); but *P. ruficollis* has much larger feet than the other two species, the hinder toe and claw varying in length from 1·0 to 0·8 inch in this species, from 0·85 to 0·7 inch in *P. stridulus*, and from 0·75 to 0·7 inch in *P. styani*.

P. ruficollis appears to be a resident in Nepal, Sikkim, and Assam.

P. stridulus appears to be confined to South China from Sechuen to Tokien.

P. styani is at present only known from the valley of the Yang-tse-kiang and the adjoining district of Eastern Thibet, but may possibly also occur in Assam. Mr. Styan describes it as common on the Lushan hills behind Kiukiang, where it frequents the thick cover of the lower slopes. It is a shy skulking bird, creeping through the cover, and only occasional glimpses of it can be obtained as it flits from bush to bush. In spring it is seen in pairs, but in autumn flocks of twenty or more are found together. From March to November they sing incessantly, more especially in spring and autumn. Mr. Styan describes the song as very similar to that of the so-called "Chinese Thrush" (*Trochalopterum canorum*), a nearly allied bird, which is kept in thousands by the Chinese on account of its wonderful singing powers. He further adds, "the song is very sweet and musical, and poured forth with a vigour which reminds me of the Sky-Lark; in the early morning, and again about sunset, it may be heard issuing in all directions from the copses high up on the hill-sides, and is one of the most beautiful notes I know."

257. TROCHALOPTERUM CANORUM.
Bought alive.

260. GARRULAX PERSPICILLATUS.
October and January.

263. GARRULAX SANNIO.
Kiukiang.

272. SUTHORA SUFFUSA.
Kiukiang.

290. ORIOLUS CHINENSIS.

295. LANIUS SCHACH.
Nankang, January and March.

306. DICRURUS CATHŒCUS.

310. CHIBIA BREVIROSTRIS.
Kiukiang, 24th September.

341. GARRULUS SINENSIS.
January, April, and November.

344. UROCISSA SINENSIS.

350. PICA CAUDATA.
Of two examples, one is a typical European Magpie and the other a *P. leucoptera*; both were shot in January.

351. CYANOPOLIUS CYANUS.
March, April, July, and November.

353. CORVUS LEVAILLANTI.
Kiukiang, July and October.

354. CORVUS TORQUATUS.
Kiukiang, September and October.

356. FRUGILEGUS PASTINATOR.

362. ACRIDOTHERES CRISTATELLUS.
January and November.

366. STURNUS CINERACEUS.
January, March, and November.

373. FRINGILLA MONTIFRINGILLA.
Kiukiang, 21st February.

375. FRINGILLA SINICA.
Kiukiang, 23rd November.

385. COCCOTHRAUSTES MELANURUS.
Kiukiang, 8th March.

397. EMBERIZA AUREOLA.
Kiukiang, 2nd May.

407. EMBERIZA CIOPSIS.
January and March.

410. EMBERIZA PUSILLA.
Kiukiang, 1st March.

432. PICUS MANDARINUS.
Lushan, 1st April. An intermediate example, the white more developed than in typical South-Chinese birds, but not so much so as in typical North-Chinese birds.

441. GECINUS GUERINI.
Five examples, making, with the skins in the Swinhoe collection, a series of a dozen, lead me to the conclusion that the Formosan bird cannot be separated. The variations in general colour, and in the amount of black on the head and white on the tail, are so great that it seems probable that a series from a great range of localities would bridge over the entire distance from *G. canus* of Siberia to *G. occipitalis* of the Himalayas, between which all these Chinese forms are intermediate.

470. TURTUR ORIENTALIS.
March.

471. TURTUR CHINENSIS.
December and January.

479. Phasianus torquatus.

Kiukiang, 1st March. A fine pair of birds of the typical Chinese form. Mr. Dresser has lately obtained some interesting examples of Pheasants from the Corea which are intermediate between this species and *P. formosanus*.

508. Coturnix communis.

February.

514. Otis dybowskii.

A female agreeing with examples from Japan. Taczanowski assures me that the East-Siberian bird is quite distinct from the European species.

521. Glareola orientalis.

December.

522. Vanellus cristatus.

Poyang Lake, January.

530. Charadrius placidus.

Two examples, without locality or date, belong to this species, which Swinhoe renamed *Ægialitis hartingi*, and Père David *Charadrius longipes*.

534. Charadrius minor.

Kiukiang, 12th September.

538. Totanus glottis.

December and January.

543. Totanus ochropus.

Kiukiang, 9th November.

550. Scolopax rusticula.

February.

553. Scolopax horsfieldi.

Kiukiang, 2nd May.

554. Scolopax gallinago.

Kiukiang, 29th April and 7th October.

559. Phalaropus hyperboreus.

Kiukiang, 30th August.

563. Tringa alpina.
Kiukiang and Nankang in winter.

566. Tringa ruficollis.
Kiukiang, 12th September.

568. Tringa temmincki.
22nd October.

570. Numenius minutus.
Kiukiang, 30th September.

578. Numenius lineatus.
Kiukiang, 2nd October. A handsome bird, distinguished by its long bill, white axillaries, and white rump.

584. Ardea cinerea.
Kiukiang, 7th October.

587. Ardea intermedia.
Kiukiang, 23rd July. It differs from the next species, in all ages and at all seasons, in having a yellow instead of a black bill.

588. Ardea garzetta.
Kiukiang, 17th November.

593. Ardea prasinosceles.

594. Ardea nycticorax.
Kiukiang, 10th July.

596. Botaurus stellaris.
Kiukiang, March.

597. Ardetta flavicollis.
Kiukiang, 10th July.

599. Ardetta sinensis.
Kiukiang, 28th June.

601. Hydrophasianus chirurgus.
Kiukiang, 22nd June.

602. Gallicrex cristata.
Kiukiang, May and June.

604. GALLINULA PHŒNICURA.
Kiukiang, 10th July.

606. PORZANA BAILLONI.
Kiukiang, 7th May.

610. FULICA ATRA.
Kiukiang, 19th November.

611. PODICEPS MINOR.
Kiukiang, 7th October. Indistinguishable from British examples. The varieties known as *P. philippensis* are found in Western Europe, and may be referable to age.

618. MERGUS MERGANSER.
Kiukiang, 20th January.

624. ANSER ALBIFRONS.
October.

625. ANSER ERYTHROPUS.
An example from the river Yang-tse-kiang, dated the 22nd of October, somewhat resembles the skin from Hakodadi which I determined as the young of the Lesser White-fronted Goose (Ibis, 1882, p. 369). I see no reason to change my opinion. They differ from the adult of *A. brachyrhynchus* in having no dark base to the bill, though the nail is dark, as it is in the adult of that species, and in young only of *A. erythropus*.

627. ANSER SERRIROSTRIS.
An example dated February measures 2·5 inches from the forehead to the tip of the beak. It is an intermediate form between *A. segetum* and *A. grandis*, which range in the length of bill, measured as above, from 2·2 to 3·4 inches. It is certainly only subspecifically distinct from the former, and probably also from the latter.

628. ANAS BOSCHAS.
Poyang Lake, December.

629. ANAS ZONORHYNCHA.
Nan Chang, December.

631. Tadorna casarca.
Kiukiang, November.

632. Anas clypeata.
Kiukiang, March.

633. Anas acuta.
Kiukiang, February.

634. Anas penelope.
January.

636. Anas crecca.
January and October.

639. Eunetta formosa.

640. Eunetta falcata.

647. Fuligula cristata.
Kiukiang, 8th March.

648*a*. Nettapus coromandelianus.
Kiukiang, June and July. The *N. kopschii* of Swinhoe in winter plumage of this species. David and Oustalet are wrong in saying that the female has no collar, and omit the important fact that she has no white on the primaries.

649. Phalacrocorax carbo.

657. Larus cachinnans.
Kiukiang, 17th November.

660. Larus ridibundus.
January and November.

662. Sterna caspia.
Kiukiang, 3rd September.

663. Hydrochelidon hybrida.
Kiukiang, 4th August.

XXXI.—*Notes on the Pink-headed Duck* (Anas caryophyllacea). By Frank B. Simson.

The Pink-headed Duck is a bird little known to the Bengal sportsman and ornithologist, and considered rare. It is, however, far from uncommon in a restricted area of Bengal, and may be said to make its home in the southern part of the district of Purneah, and in the country which borders the left or northern bank of the Ganges, between the Coosy River, which separates Purneah from Bhangulpore, and in the Maldah district. It is found more sparingly in Bhangulpore and Tirhoot, and occasionally in likely places in the North-western Provinces and in Upper India. Jerdon records it from Madras, though he never saw it in the flesh there. Specimens have been obtained in the Calcutta bazaar, which has yielded more ornithological rarities than any single place in India. Col. Irby tells me he met with it, and this can be relied on. But many people in Bengal have told me that they had shot it in various places; nevertheless, whenever I could test these statements I never found that any such Duck had been killed lower in Eastern Bengal than Maldah. The birds called Pink-headed always turned out to be Red-crested Pochards.

The country mentioned on the north of the Ganges which I have referred to as the home of this Duck is alluvial, and consists of vast, extensive, and much-neglected plains, studded at considerable intervals with small poor villages, intersected with very deep clear streams, all running to the Ganges and abounding in crocodiles. These plains are difficult to cross on foot in the dry season, except by paths that cannot be called roads; elephants are generally used by all but the poor to travel with across these wastes, which are often inundated when the Ganges rises high. To such an extent do these inundations occasionally prevail that the human inhabitants are compelled to take to boats, while the deer and game generally resort to the few highest spots, where they are often slaughtered. The tigers have even been known to live for a time in trees, where, apparently, they feed on turtles, small crocodiles, and dead animals which come floating near the trees.

Scattered among these plains are pools of deep water, extending over areas of from ten to forty acres, abounding in wild fowl and crocodiles, surrounded by very high grass with stalks like thin bamboo. A few stumpy trees, hidgels and others, grow in this grass, the pools are covered with beautiful lotus plants, and here the Pink-headed Duck resorts at all seasons of the year.

I believe I met with this Duck long ago, about 1849, but at that time I took no notes. Those were the days when many would-be ornithologists could get no books to study. Jerdon and Hume were unknown. *Esacus recurvirostris* was called by many of us the Goggle-eyed Plover, and *Pericrocotus speciosus* the Flame-coloured Shrike. Yet we sought rare and beautiful birds keenly and obtained them more easily when youth was vigorous, official work lighter, and examinations unknown, than now. In 1862, and for some time afterwards, I made this bird a subject of careful observation.

One morning in May, very early, I was standing, almost without clothes, at the door of a travelling bungalow on the trunk-road in Purneah, watching two Florikens with a binocular as they wheeled about in the sky, when about a dozen dark Ducks, with lovely, rosy, light-coloured feathers under their wings, alighted in a tank close by. I immediately got my gun, and fortunately was able to get close and bag two. After this I was always on the look out and shot numbers of them before I left that part of Bengal.

Dr. Jerdon visited me while I was stationed at Purneah, and told me he had never seen the bird alive, and that the picture in his illustrations was drawn from a dried skin. I promised to show him and get him some specimens, and I did so in this wise. We were both at a shooting-party given by that hospitable planter and owner of Kolassy, so well known and liked in Purneah, and were shooting with a long line of elephants, looking for that wonderful tiger which is always there when no one has a gun or wants him, and always somewhere else when made an object of special pursuit. In default of this tiger we shot buffaloes, deer, Floriken, and Partridges, and shouted at hogs, which were reserved for the spear. Whilst going on I marked a small party of Pink-headed Ducks into one of the pools I have described, and immediately told Jerdon that if he would leave the party and come with me I thought I could get a nice shot at his long-coveted birds. So we took four elephants and started.

Of course, with noisy splashing animals, any approach to Ducks was impossible; on the other hand the pool was full of huge crocodiles. We could see them with our glasses. However I agreed to go on foot, the elephants to come to me the moment the shots were fired. I passed through the tall bamboo-grass in water deepening till it was nearly up to my waist as I came to the edge, and found myself about twenty yards from ten or a dozen of the Ducks. They were not sitting close together, so I shot the finest with one barrel and another as they rose, and I made off to the elephants as hard as I could.

Once safe on Behemoth I surveyed with Jerdon the sight, familiar to every Indian ornithologist, but always enjoyable and never to be forgotten, of the wonderful variety of bird-life to be seen in a spot like this. The crocodiles just slowly sank, with scarcely a ripple on the water. Various Rails ran into the grass where the Purple Gallinules, which Jerdon called Purple Coots, were making most wonderful noises. Jacanas ran round and about on the broad lotus-leaves. The lovely *Hydrophasianus chirurgus* flew mewing round the pool. Two huge and graceful Sayrus Cranes rose from the shallow end, where they had been in company with a large flock of clumsy Pelicans, who flopped in long line slowly away, perhaps towards the district of Rajshahye, where I knew of a favourite roosting-place. A flock of Pigmy Cotton-Teal flew rapidly round, uttering their peculiar notes. A large flock of Whistling Teal made off to the next pool. The Long-necked Snake-birds, with their beautiful scapular plumes, dropped quietly off the branches of the hidgel trees, dived, came up at a distance, shook themselves, and flew off or dived again. Several bright Herons, who had been fishing even in the daytime in these quiet waters, disappeared with many a *wāk-wāk*. Common Herons rose likewise, and Egrets and Paddy-birds. Little Cormorants were to be seen in numbers. All the various kinds of Ducks so common here in February and March, such as Pintails, Blue-winged Teal, White-eyed and Grey Ducks, with Gadwall, Shovellers, and Common Teal, were absent now. But the air seemed alive nevertheless with wading and swimming birds. After having discussed all the species we saw, we examined the two Pink-headed Ducks we had picked up with the aid of the elephants. Jerdon was delighted with them, and said that the pink of the head was far more beautiful than in dried specimens. He considered them very valuable. We then made off to rejoin the shooting-party, and in going to them put up seven Bitterns, which to me were more uncommon birds than the Ducks.

The Duck's plumage is fully described by Jerdon and Hume; I need only here refer to its habits. It lives in this country all the year round, generally it is found in small flocks of from eight to twelve; probably these are the old birds and the young ones of the year. It never associates, so far as I saw, with other Ducks, nor gets into large flocks. In the breeding-season it pairs and nests in short grass on dry land at some distance from the pools. I have seen the eggs, but cannot now describe them. I have had the young ones brought to me, and should think they could be easily domesticated, for the bird seems exactly like the Mallard, except in size and plumage. I have never met with the bird far from these plains, and I remarked its absence when shooting at the foot of the Himalaya lowest ranges in the north of Purneah. The taste of this Duck when cooked is inferior; indeed I prefer every other Duck save the Shoveller to it, and consider it worse than the Brahminy Duck or the Whistling Teal.

There are many reasons why the Pink-headed Duck is not well known. One I have just given, viz. that it is poor on the table; another is that it is never very numerous nor goes in flocks; the native shikarrie can never kill a lot at one shot, nor net a large number. The sahib can never get many shots in one day, nor is his prize when gained so valuable to him as the other Ducks, which are so much more numerous and so much better to eat. It does not associate much with other Ducks, but keeps rather to itself, and seldom is seen flying to the feeding-ground before sunset, but stays all day in the pools, where it lives till disturbed. But if a person residing in Purneah, Bhangulpore, or Maldah, chooses to make the bird an object of special pursuit he should have no difficulty in procuring as many as would be necessary.

XXXII.—*On the Species of the Genus* Pernis *inhabiting Japan.* By J. H. Gurney.

In 'The Ibis' for 1880, pp. 196, 197, I noticed the discrepancy in the views of various ornithologists as to whether the species of *Pernis* which occurs, though very rarely, in Japan is *P. apivorus* or *P. ptilorhynchus.*

On the 4th September, 1882, a specimen of a *Pernis* was obtained by Mr. P. L. Jouy at Chiusenji, about 90 miles north of Yokohama, at an elevation of 4375 feet above the level of the sea.

This specimen, which was ascertained by the collector to be a male, was added to the United States National Museum, and was recorded by Mr. Ridgway in the 'Proceedings' of that Institution for 1883, p. 311, under the name of *Pernis ptilorhynchus*; it has subsequently been referred to by Mr. Blakiston in his 'Amended List of the Birds of Japan,' p. 67, as "*Pernis apivorus*?"

Mr. Ridgway, who informs me that he feels "undecided as to which species it really is," has been so good as to send me a description of this specimen, which I here transcribe:—

"Above, superficially, nearly uniform dark brown, with a purplish gloss; the feathers white at the base. Entire side of head, including forehead and malar region, uniform ash-grey. Occipital and nuchal feathers abruptly white at base (this showing wherever feathers are disarranged), the terminal portion black, edged with hair-brown. Chin and throat white, the former tinged with ash-grey, the latter having the feathers tipped with light fawn-colour. Along each side of the throat a very distinct deep black stripe, anteriorly fading gradually into the ash-grey of the malar region (but distinct till within an inch of the base of the mandible), posteriorly connected with a cluster of deep black guttate spots across the upper part of the jugulum, and which, medially, extend into the lower portion of the throat. Rest of lower parts, with the ground-colour, white; but the whole breast marked with large hair-brown spots, having broad black shaft-streaks, the belly and thighs broadly barred with lighter brown, the interspaces being more buffy, especially on the tibiæ. The tail is crossed (beyond the coverts) by three black and three dull-grey bands, as follows:—first, a narrow terminal band of light brownish grey, about ·25 of an inch wide; next a black band 1·25 inch wide; then a grey band (crossed by five rather indistinct black bars) 2·25 inches broad; the next band black and 1·25 inch broad; the following one dull grey (crossed by four blackish bars) 1 inch broad.

"The axillaries are brown, broadly barred with white, the brown spaces being ·60 to ·80 of an inch wide, and the white ·25 to ·30 of an inch. There is apparently no crest, although the feathers of the occiput and nape are rather lengthened and somewhat lanceolate.

"The primaries and rectrices are moulting, but the measurements are given for what they are worth:—wing 16·50 inches, tail 9·50, culmen (including cere) 1·45, tarsus 2·10, middle toe (without claw) 2."

On the whole, this description appears to me to point to *P. apivorus* rather than to *P. ptilorhynchus*, although the "very distinct deep black stripe along the side of the throat, posteriorly connected with a cluster of deep black guttate spots across the upper part of the jugulum," is, it must be admitted, especially when existing in an adult bird, much more like *P. ptilorhynchus*. I have seen such markings in *P. apivorus*, but only, so far as I recollect, in immature specimens, and then not so distinct or so dark as they usually are in *P. ptilorhynchus*, in which latter species they also occur more frequently than in *P. apivorus*; on the other hand, the description of the axillaries in the Japanese bird is, if I mistake not, conclusive as to its being an example (though somewhat abnormal as regards the dark markings on the throat) of *P. apivorus*.

This specimen, judging from the grey upon the head and from the character of the markings on the tail, is, I believe, adult; but the circumstance of the grey on the crown of the head being limited to the forehead probably indicates its having only recently attained the adult dress, and that not quite completely.

So far as I have observed, the adults of *P. apivorus* always have the axillaries distinctly and broadly banded with alternate bars of brown and white, though in birds of the year the white bars are sometimes absent.

In *P. ptilorhynchus*, on the contrary, although some young birds have the axillaries brown banded with white, and others have them brown with a spot or two of white towards the end of the feathers, the adult grey-headed birds have always, so far as I have been able to ascertain, the axillaries either entirely brown without bands or else banded with pale brown on a darker ground, but not with white, as in the adults of *P. apivorus*; believing this distinction to be a constant one as regards the adult birds, I would refer the specimen under consideration to *P. apivorus* and not to *P. ptilorhynchus*.

I may add that although the fact of this example being crestless is in favour of identifying it with *P. apivorus*, which always is so, it does not in itself prove this identification to be correct, as *P. ptilorhynchus* is also sometimes crestless, although such specimens are very much in the minority, and must be regarded as exhibiting an exceptional variation from the normal form.

XXXIII.—*On the Geographical Distribution of Birds in European Russia north of the Caucasus.*—Part I. Rapaces Diurnæ. By M. MENZBIER.

IN the beginning of the year 1882 I published in Russian the first part of my work entitled 'Ornithological Geography of European Russia,' wherein I described the distribution of the Birds of Prey throughout European Russia. I wished to demonstrate clearly the limits of the distribution of the different species of birds in that country, and to show the connexion between the ornithological fauna of European Russia and that of the Palæarctic Region. My preliminary notes on that subject I have already given in the beginning of my work, and also in my article entitled "Revue comparative de la faune ornithologique des gouvernements de Moscou et de Toula," but I will give a more detailed account in the concluding chapters of my 'Ornithological Geography.'

I wish here to acknowledge my great obligations to Mr. Severtzov, who kindly placed at my disposal his entire ornithological collection and manuscripts on these subjects. I also take this opportunity of offering my sincere thanks to others of my fellow-labourers in ornithological science, especially Mr. Pleske, Mr. Alferaki, and Mr. Djakov, to whom I am greatly indebted.

NEOPHRON PERCNOPTERUS.

The Egyptian Vulture is a very rare and local bird in Russia. It breeds in the Crimea, where a few birds remain throughout the winter, and in the Government of Podolsk (in the district of Magilev); but it only occasionally visits the Government of Voronesh and the steppes of the Caspian Sea, a very few straying as far north as Sarepta and Orenburg.

VULTUR MONACHUS.

The Black Vulture is rare in Russia, where it breeds in the south-eastern and southern parts of the country, and is an accidental visitor to the western part.

It breeds in the southern and south-western Ural ranges, between the rivers Sakmara and Ik, and is sedentary in the

Crimea. Perhaps it is an accidental visitor to the Government of Voronesh; occasionally it is found in Bessarabia and throughout Western Russia south of the Baltic (Poland, Courland, Livonia).

GYPS FULVUS.

The breeding-range of the Griffon Vulture in Russia may be said to extend over the Government of Podolsk, Bessarabia, the Crimea, and the Kaslinsky Ural. The bird is very common and sedentary in the Crimea, but less common and partially migratory in the rest of its range. Occasionally it is found in the south-west and south of Russia. Mr. Taczanovsky records the Griffon Vulture as very rare, being even more rare than the Black Vulture in Poland. Twice it has been observed in the Government of Kiev, in the district of Uman. In the Governments of Ekaterinoslav, Kharkov, and Voronesh the bird is a more regular visitor; but it has only once been found near Sarepta. East of the Volga the Griffon Vulture is more common in the Obschy-Syrt. In the Ural Mountains it strays as far north as Pavda.

Pallas did not find the Griffon and Black Vultures in the Ural Mountains, nor according to Eversmann were they found either in the Ural Mountains or their branches during the ten years from 1820 to 1830. Since the latter year these Vultures have been found in the above-mentioned countries, having become more and more common of late years, and since 1850 both species have been generally distributed in the southern Ural Mountains. Mr. Pleske informs me that *Vultur monachus* was not uncommon there during the years from 1869 to 1873. *Gyps fulvus* was observed by this gentleman several times during those years at Orenburg and about the river Danghuz. Mr. Sabaneev's observations on the breeding of the Griffon Vulture in the Kaslinsky Ural were made also after the year 1865.

HYPOTRIORCHIS SUBBUTEO.

The Hobby is a well-known breeding bird in all the wooded districts of Russia south of lat. 65°, but in Finland its northern breeding-limit is about lat. 64°.

It is very common in all the northern and central portions of the country, more rare about the northern limits of the southern steppes, and only local in the last-mentioned locality. In the valley of the Lower Volga it breeds as far south as the mouth of that river, but it is not known to winter in any part of Russia.

FALCO PEREGRINUS.

The Peregrine Falcon is so variable in its dimensions and shades of colour that it is very difficult to distinguish the types in their variations. An attempt was made by Pastor Chr. L. Brehm, who established four types of *Falco peregrinus*—*F. p. abietinus, F. p. cornicum, F. p. griseiventris, F. p. leucogenys*; but Brehm's types of the Peregrine Falcon have not been accepted in science. In the course of several years I have examined nearly 300 specimens of the Peregrine Falcon from different parts of the Old World, and, judging from these, I should say that in the Northern Palæarctic Region we have two specifically distinct forms of the Peregrine Falcon, these forms being very distinct from each other in their different ages, and having geographical ranges, comparatively, very clearly defined: these are *Falco peregrinus* and *F. leucogenys*. I am convinced also that the specimens of *F. peregrinus* from Western Europe are very variable in character, and that specimens of this bird from Russia and Northern Asia are more constant. So far as I can judge from the examples which I have examined, there are three races of the Peregrine Falcon existing on the continent of Europe and the northern half of Asia—*F. p. griseiventris, F. p. cornicum,* and *F. p. brevirostris,* the first two of which were described thirty years ago by Brehm, and the last-mentioned by me two years ago.

I now propose briefly to describe the principal characters of plumage which I have found in the three above-mentioned races of *F. peregrinus*.

(A) FALCO PEREGRINUS GRISEIVENTRIS.

Adult male. Above delicate bluish grey, only indistinctly barred with dark grey on the rump and with darker-coloured head, neck, and the upper part of the mantle; forehead whitish; cheeks, ear-coverts, and moustaches blackish grey; the chin and throat spotless white, with a tinge of pale yellow on the throat; the breast and the abdomen more or less yellow with a tinge of grey, more darkly developed on the flanks, and paler on the under tail-coverts, axillaries, and under wing-coverts; the spots, reduced to mere triangular dots, exist only here and there on the middle portion of the under breast, abdomen, and thigh-coverts; on the sides, axillaries, and under wing-coverts they are replaced by narrow arrow-head bars; under tail-coverts spotless, or only with faint traces of bars. The very adult bird has nearly the whole under surface of the body spotless, with a deeply developed tinge of grey.

Adult female. Similar to the adult male, but more deeply coloured, and with more developed spots and bars on the under surface of the body.

Young male. Above dark brown, with the exception of the head, which is paler; forehead whitish; crown of head brown tinged with pale rufous; a broad streak from the hind part of the eye to the nape, and the whole of the latter whitish with a few dark brown spots; all the feathers of the back dark brown, margined with pale rufous; cheeks, ear-coverts, and moustaches dark brown; under surface of the body whitish, with longitudinal spots of brown on the throat, breast, abdomen, flanks, and thighs, and with bars on the under tail-coverts.

Young female. Similar to the young male, but much larger.

According to Pastor Chr. Brehm *Falco peregrinus griseiventris* breeds throughout Scandinavia (probably occasionally in the plains and not in the mountains, where it is replaced by a small variety of *F. p. cornicum*), and is found in Northern Germany on migration. It does not breed in Central Russia, but visits that country during the spring and autumn. A very typical specimen of that bird from Novaja Zemlja is in the Museum of Vienna. Two specimens, male from the mouth of the Ussuri river and male from Kultuk, were presented by Messrs. Dybovsky and Gadlevsky to the Museum of Warsaw. The same variety of the Peregrine Falcon was obtained by Colonel Prejevalsky in the country about the river Ussuri; but in Mandshuria it is replaced by the other variety, which is nearly as dark as *Falco melanogenys.* It is the same race, which, according to Messrs. Middendorff, Finsch, and Russov, breeds *on the ground* in the tundra and in the marshes of the wooded country of Livonia. Probably *F. p. griseiventris* breeds throughout the whole tundra and wooded country ("forest") from Greenland to the Amoor country, migrating during the winter more southwards, as far as the Antilles, Southern Europe, Egypt, and India. Specimens of this race from Greenland, the Antilles, Southern Europe, and India are now preserved in the British Museum. A specimen of this race, in change from the first to the second year's plumage, obtained (in winter) near Lake Menzaleh, Egypt, is now preserved in the Museum of Vienna. Two specimens of it, obtained in the Crimea, are now in the Museum of Moscow; a third skin (♀ juv.) of that race was obtained $\frac{22}{10}$ XI. in the Gardens of Tashkent, and a fourth (♂, $\frac{23}{11}$ I.) in Ferghana (coll. of Mr. Severtzov).

Respecting the distribution of this bird in European Russia I can state as follows:—Novaja Zemlja; according to Mr. Hoffmann, an adult female and young ones were found near lat. 68°; by Messrs. Seebohm and Harvie-Brown the Peregrine Falcon was observed at Ust-Zylma, on the banks of the river Zylma, and at Stanovaja-Lachta. It is not uncommon breeding near Archangel, and more rare in Lapland. More to the south it is found in Finland, in the Government of St. Petersburg, Esthonia, and Livonia; but I do not know whether this race breeds in the Government of Tver, and I cannot find anything recorded of it in the Governments of Olonetz and Vologda. More to the east it breeds in the Governments of Wjatka and Perm.

During the autumn, winter, and spring *F. p. griseiventris* visits the Governments of Central and Southern Russia, but young are more commonly found than adults.

(B) FALCO PEREGRINUS CORNICUM.

Adult male. Above very dark; the head, neck, upper part of the mantle, cheeks, ear-coverts, and moustaches slate-black; the rest of the upper surface slate-blue, barred with dusky slate-colour; under surface of the body very rufous, with prevalent grey tint on the flanks, abdomen, and thighs. Chin spotless; throat with longitudinal spots of black; breast, abdomen, flanks, and thighs crossed with blackish bars, taking the form of spots in the centre of the breast; under wing-coverts blackish grey, spotted with ferruginous buff. With the advance of age the rufous colour on the under surface of the body becomes more intense, and neither spots nor bars disappear, though they decrease.

Adult female. Similar to the adult male, but more deeply coloured, and with more developed spots and bars on the under surface of the body.

Young male. Above blackish brown, with a wash of grey; crown of head brown, tinged with rufous; nape blackish brown, mottled with rufous; cheeks, ear-coverts, and moustaches black; under surface of the body deep rufous; chin with narrow indistinct shaft-stripes; throat, breast, and abdomen with large longitudinal spots of black-brown; flanks and thighs with transverse spots; under tail-coverts barred.

Young female. Similar to the young male, but much larger.

According to Pastor Chr. Brehm *Falco peregrinus cornicum* breeds throughout the central portion of Europe, straying during winter as far south as Egypt. I have seen many specimens of this race obtained from the mountain-country of Germany, Switzerland, Northern Italy, and Eastern France.

In European Russia it breeds in the Ural Mountains, in the Governments of Perm and Orenburg, on the rocks on the rivers Belaja, Kama, and the Middle Volga, and in the Governments of Kazan and Simbirsk. More west and south it is only an accidental visitor during autumn and winter.

Examples of *F. p. cornicum* from the Ural are much darker than those from Central and Western Europe, and nearly as dark as *Falco atriceps* from North-western India.

After a careful examination of several specimens of the Peregrine Falcon from Scandinavia, preserved in European Museums, I am convinced now that *F. p. abietinus* is only a small variety of *F. p. cornicum*, replacing it in the mountain-country of Sweden and Norway.

(C) FALCO PEREGRINUS BREVIROSTRIS.

This race of the Peregrine Falcon generally is larger than the others, in comparison with which it has a shorter and larger bill.

Adult male. The colour of the upper part of *F. p. brevirostris* is intermediate between that of *F. p. griseiventris* and *F. p. cornicum,* this race being more deeply coloured than the former and more clearly than the latter.

Above bluish grey, with darker-coloured head, which is streaked with narrow shaft-stripes of blackish ash; back and wing-coverts barred with dark grey; cheeks and moustaches blackish grey, the former clearer than the latter; under surface of the body white, tinged with rosy yellow on the throat and breast, and with delicate grey on the abdomen, flanks, and thighs; chin spotless; throat with narrow longitudinal spots of black; breast, abdomen, flanks, and thighs crossed with narrow bars of blackish, taking the form of spots in the centre of the breast and abdomen; under wing-coverts blackish grey spotted with whitish. With the advance of age the white colour on the under surface of the body becomes more and more pure, the spots and bars nearly disappear, and the quite adult bird has nearly the whole surface of the body spotless, only with a faint trace of grey.

Adult female. Similar to the adult male, but much larger.

Young male. Generally similar to the young male of *Falco peregrinus cornicum,* but not so deeply coloured, and with a whiter nape.

Young female. Similar to the young male.

This race of the Peregrine Falcon is resident in Central Russia, where it breeds in the large woods of all the Governments, being common during the winter in towns. More to the west I found the same race of the Peregrine Falcon breeding in Poland, in the eastern parts of North Germany, in the plains of the Danube, and in Lombardy. But in the plains of Scandinavia, in Southern Germany, Lombardy, France, the British Islands, Spain, and the other parts of Middle and Western Europe specimens intermediate between *F. p. cornicum* and *F. p. brevirostris* are more common, which are unknown in Russia. East of European Russia this race breeds in some parts of Western Asia. During the winter it is found as far east as China and as far south as Ceylon, India, Arabia, and the Crimea (specimens preserved in the British Museum and in the collection of Mr. H. Seebohm).

Concisely, the differences between the three above-mentioned races of the Peregrine Falcon are as follows:—

F. p. griseiventris.	*F. p. cornicum.*	*F. p. brevirostris.*
Above delicate bluish grey; cheeks and moustaches blackish grey; chin and throat spotless white, with a tinge of pale yellow on the throat; the rest of the under surface of the body with a deeply developed tinge of grey, and only with traces of spots on the middle portions of the under breast, abdomen, and thighs, replaced by narrow bars on the flanks, axillaries, and under wing-coverts.	Above very dark; cheeks and moustaches slate-black; under surface of the body, with the exception of the chin, very rufous, with a prevalent grey tint on the flanks, abdomen, and thighs; chin spotless, the rest of the under surface very spotted and barred; under wing-coverts blackish grey spotted with ferruginous buff.	Above bluish grey; cheeks and moustaches blackish grey, the former clearer than the latter; under surface of the body white, tinged with rosy yellow on the throat and breast, and with very delicate grey on the abdomen, flanks, and thighs; with the advance of age the spots and bars on the under surface of the body nearly disappear; under wing-coverts blackish grey spotted with whitish.

FALCO LEUCOGENYS.

In its colouring, dimensions, and geographical range *Falco leucogenys* is intermediate between *Falco peregrinus* and its more southern representatives, *Falco barbarus, F. feldeggii, F. tanypterus,* &c.

Concisely, the differences between *Falco peregrinus* and *Falco leucogenys* are as follows:—

F. peregrinus.	*F. leucogenys.*
Very massive; feathers underneath the eye dark, confluent with a broad moustachial band; pale patches on the nape, which disappear with the advance of age; very variable in shades of colour, but more clearly coloured specimens have the breast and abdomen either white or tinged with grey.	Very elegant; feathers underneath the eye unspotted fulvous or only with brownish-grey traces, clearly defined from a narrow moustachial band; the nape mottled with fulvous during its whole life; very constant in the shades of colour, clear bluish grey above, white tinged with fulvous on the under surface of the body.

The following is a more detailed description of *Falco leucogenys*:—

Adult male. Above clear bluish grey, only indistinctly barred with darker grey and with paler-coloured lower back, rump, and upper tail-coverts; the forehead whitish; the nape mottled with fulvous; the feathers underneath the eye unspotted fulvous or only with brownish-grey traces; a narrow moustachial band dark bluish grey; tail bluish grey, tinged with brownish and barred with darker grey (seven transverse bars); quills dark brown, externally shaded with grey; chin white; rest of the under surface tinged with fulvous, the throat unspotted, the breast and abdomen only with traces of bluish-brown spots, inclining to narrow bars on flanks and under tail-coverts; thighs tinged with blue and mottled with transverse spots; under wing-coverts creamy white mottled with brown; axillaries white barred with brown.

Adult female. Similar to the adult male, but more deeply coloured above and more spotted on its under surface. The nape mottled with fulvous, as in the adult male.

Young male. Above brown; the forehead whitish; crown brownish fulvous, with conspicuous margins of fulvous; the nape and hind neck pale rufous mottled with brown; the back, rump, scapularies, and wing-coverts brown margined with rufous, the upper tail-coverts brown barred with rufous; tail greyish brown, edged and barred with pale rufous; quills dark brown, edged and spotted on the inner web with pale rufous; feathers underneath the eye unspotted fulvous, or only with brownish traces; a narrow moustachial band dark brown; chin unspotted fulvous; rest of the under surface fulvous, the throat, breast, abdomen, flanks, and thighs with brown streaks, the under tail-coverts irregularly barred with brownish; under wing-coverts brown, broadly margined and spotted with clear buff.

Young female. Similar to the young male, but much larger.

After the first moult *F. leucogenys* takes a plumage which differs from that of the adult in being more spotted on the under surface of the body, and having the upper tail-coverts rufous, tinged and barred with greyish blue.

This Falcon breeds probably throughout all the steppes, from the Middle Danube to the Altai Mountains, migrating during the winter as far south as Egypt and India.

I do not know whether this species breeds in Lombardy, but I saw a young specimen, obtained in Piedmont, in the Museum of Turin. More to the east it breeds throughout the plains of the Danube (from which I know of two specimens in the Museum of Vienna), and in the Dobrudscha (a specimen in change from the first to the second year's plumage, obtained in the Dobrudscha, is preserved in the collection of Mr. Alléon), in Southern Russia (specimens in the Zoological Museum of Moscow, in my collection, and in the collection of Mr. Severtzov), and in Western Siberia (the Zoological Museum of Moscow and the collection of Mr. Severtzov).

Some specimens of this species remain all the year round in their breeding-quarters, others migrate southwards during the winter. In the Museum of Vienna I saw some specimens of *F. leucogenys* from Egypt, obtained during the winter near Lake Menzaleh. A specimen obtained at Lenkoran (Transcaucasia) is now preserved in my collection. Others, obtained at Chimkent, in the country of the Lower Amou-Darya, near Issyk-kul, and in Ferghana, are to be seen in the Zoological Museum of Moscow and in the collection of Mr. Severtzov. Two young specimens, from Babylon and Northern India, I saw in the British

Museum. This form has been found several times in Northern Germany and Central Russia, but is there very rare and occasional.

HIEROFALCO ISLANDUS.

A specimen of the Iceland Jer-Falcon was obtained in April 1863 near Dorpat.

HIEROFALCO GYRFALCO.

The Brown Jer-Falcon is common and resident only about the Varanger Fiord, near the coast of Murman and Lake Enare. More to the south it occasionally breeds in Lapland, but is only a rare and accidental visitor to the other parts of Russia, as far to the south-east as the central Governments, though it is said that exceptional cases are found of its breeding on the rocks of the Baltic Sea near the coast of Esthonia.

Since the year 1860 a specimen of this bird has been obtained in the district of Jamburg (in the Government of St. Petersburg), and Mr. Russov once saw this bird upon the Neva in St. Petersburg. Several times the Brown Jer-Falcon has been found in the Baltic provinces and in Poland; and according to Mr. Djakov it is very possible that the same species was observed during the winter in the Government of Tver. Once or twice this bird has been found during the winter season in the Government of Tula, and once at the end of autumn in the Government of Riazan.

HIEROFALCO URALENSIS.

The Ural Jer-Falcon is a very interesting intermediate race between the Arctic Jer-Falcon, Brown Jer-Falcon, and Henderson's Jer-Falcon. The immature examples of this race in their first plumage are intermediate between specimens of a corresponding age of *Hierofalco gyrfalco* and adult *Hierofalco hendersoni*; but the adult is very light, nearly white, and is intermediate between the grey and white arctic race. This form will be more fully described in Mr. Severtzov's and my monograph of the Jer-Falcons.

On the distribution of this Falcon in Russia we have the following notes. According to Mr. Meves the Brown Jer-

Falcon breeds on the Kanin peninsula, and I think that the *H. gyrfalco* of Mr. Meves is really *H. uralensis.* Mr. Goebel informs us that it is resident near Pinega. Probably it is the same species which was observed several times on Novaja Zemlja. According to Hoffmann the Ural Jer-Falcon breeds near Ust-Ussa (lat. 66°). On the authority of Mr. Sabaneev it is found in the districts of Krasnoutimsk and Ufa, but is no longer met with in the districts of Karslinsk and Kashtym, where it was formerly known. According to Eversmann the Ural Falcon used to breed from 1850 to 1860 in the mountains near the Belaja river, and probably breeds there still. Dr. Finsch met with a specimen, which probably was the Ural Jer-Falcon, near Perm. During the winter the bird has been obtained as far south as the Government of Orenburg and the Obschy-Syrt, and as far west as the Governments of Vladimir and Orel.

HIEROFALCO SAKER.

The Saker Falcon breeds regularly in the steppes of Southern Russia, and occasionally in the southern and eastern portions of Middle Russia; but it is a rare and accidental visitor to the central portions of the country, and has never been obtained in the northern Governments.

According to Mr. Sabaneev it is found in the districts of Kamischlov and Shadrinsk. In the branches of the Ural as well as in the steppes near them it is not uncommon. In the steppes near the Ural river, the Middle and Lower Volga, this bird is not rare, still breeding there on the islands of the Volga and in the Sarpa hills. But at Astrakhan the Saker is rare and probably only found during migration, though more to the south, in the valleys of the Terek and the Kuban, it is said by Bogdanov to be common. It breeds and is not uncommon in the Governments of Saratov, Voronesh, Kharkov, Kiev, and Chernigov, has been several times observed in the Government of Kazan (probably only in the southern part of that country) and Tula, and still breeds in the Government of Orel; but we do not know the distribution of this bird in the Governments of Riazan, Tambov, and

Kursk. It was formerly a common breeding bird in the Government of Podolsk, where it has become rare during the last twenty-five years; but it is only a rare and accidental visitor to Litva, and, according to Mr. Taczanovsky, has never been obtained in Poland. In the steppes of New Russia and in the Crimea this bird is rare, being resident there in the mountains and on the southern coast of the Crimea.

Mr. Seebohm, on the authority of Mr. Henke, states that the Saker Falcon has been once obtained near Archangel in winter, and breeds on the Kanin peninsula. But this is without doubt a mistake; according to Mr. Meves the Brown Jer-Falcon* breeds on the Kanin peninsula, and it is very possible that Mr. Henke has taken the young specimen of the Brown Jer-Falcon for the Saker.

LITHOFALCO ÆSALON.

The Merlin breeds regularly throughout the northern, and occasionally in the central portions of Russia; but on migration and during the winter it has been observed in the whole southern half of that country.

According to Mr. Mela it breeds in all parts of Lapland and Finland, from the Gulf of Finland to the Varanger Fiord; but there it is rare southwards from lat. 62½°. It is more common near the Ladoga Lake, in the country near the Onega Lake and on the Dvina, and was found by Messrs. Seebohm and Harvie-Brown in the valley of the Lower Pechora (on migration it is there very common near Ust-Zylma, lat. 65° 26′). In the Ural Mountains at present we know its breeding-range only as far north as lat. 57°, but without doubt it will be found there still further north. It breeds in the district of Ekaterinburg (in the Government of Perm), and probably also in the Governments of Kazan and Riazan. It breeds and is not uncommon in the Governments of Vologda, Jaroslav, Vladimir, Moscow, Tver, and Pskov, and rarely in the Government of St. Petersburg and in the Baltic provinces. It is still rarer and only accidentally breeds in the Governments of Grodno, Chernigov, Smolensk, and Tula (only in the northern part of the last).

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* I think it more likely that the lightly-coloured eastern representative of *H. gyrfalco*—*H. uralensis*—breeds on the Kanin peninsula.

On migration the Merlin is common in the Baltic provinces, in Poland, in the Governments of Podolsk and Kiev, rare in the Governments of Kharkov and Voronesh, more common in the Governments of Simbirsk and Astrakhan.

During the winter this bird has been seen in the Baltic provinces as well as in all the central Governments (in the Governments of Jaroslav, Vladimir, Moscow, Riazan, Tula, and Smolensk), and not uncommonly in Southern Russia. It has been observed in winter also near Astrakhan and in the Crimea.

ERYTHROPUS VESPERTINUS.

The Red-footed Falcon is distributed throughout the whole of Russia south of lat. 65°; but is only an accidental visitor to Finland. In the northern part of its breeding-range it probably has become more common during the last forty or fifty years, that country having previously been too wooded to suit it. According to Mr. Teploonchov the Red-footed Falcon is not uncommon in the Ural Mountains as far north as lat. 58½°, and probably breeds near the Obva river. On the Ural expedition this bird was observed near Perm; according to Mr. Lilljeborg and others it is very common in the neighbourhood of Kargopol; but its northern breeding-limit from Perm to Kargopol is unknown. Mr. Henke records it as breeding in a colony on an island near Kholmogory, on lofty oaks, and it is still common near the Sego Lake and Lake Onega; but it is rare on the north coasts of Lake Ladoga, only very few straying as far north-west as Torneo and the central portions of Finland (it has been more common since the year 1867). It is one of the rarest breeding raptorial birds in the Baltic provinces, and is much scarcer in some localities of those provinces, as Courland and the Government of Vilna. In Central Russia, as far east as the Oka river, the Red-footed Falcon has become very rare during the last few years; but it was common there ten or fifteen years ago. It is not uncommon in the country between the Oka and Volga, and is very common in the Governments of Samara, Uta, and Orenburg. After 1875–76 it became very rare in some portions of the last-mentioned Government; for example between Orenburg and Orsk. It is rare on the Lower Volga (Mr. Henke occasionally found it breeding north of Astrakhan), and not uncommon in the Government of Stavropol. On the authority of Mr. Severtzov this bird bred commonly near the Biting river (in the Government of Voronesh) from the year 1840 to 1850, but is very rare there now. I saw it occasionally in the district of Ladonsk (in the same Government) during the summer of 1880. From the year 1830 to 1850 this Falcon was very common in the Government of Kharkov and in the steppes of the Black Sea; but I found it rare in that country during the summer of 1832, though it is still a common local bird in the Government of Kiev. According to Messrs. Shatilov and Radde this bird breeds rarely in the steppe of Tamak, in the Crimea.

On spring and autumn migration the Red-footed Falcon is now exceedingly common in the central and southern portions of Russia, and has, I think, migrated from the last-mentioned countries more northwards only during the last forty or fifty years.

CERCHNEIS CENCHRIS.

The Lesser Kestrel breeds only in the steppes of Southern Russia. According to Eversmann it is not rare in the steppes of the southern branches of the Ural, and Mr. Severtzov has furnished me with some very interesting notes on the history of that bird during the last twenty-five years in the Government of Orenburg. On the authority of Mr. Severtzov, the Lesser Kestrel was rare in the steppes near the Upper Ural river in the year 1860, and at the same time the Red-footed Falcon was very common there. Fourteen years after, in 1874, the bird became more common in the above-mentioned country, though generally it was not very numerous, and in that year the Red-footed Falcon was as common as before.

Three years after, in 1877, the Red-footed Falcon became very rare in some parts of the steppes of Orenburg, and the Lesser Kestrel became exceedingly common; thousands of the latter species were found by Mr. Severtzov upon the telegraph-wires on the wayside between Orenburg and Orsk. There is no doubt that some connexion exists between the numbers of these species; but we do not know whether the Lesser Kestrel has become more common since the migration of the Red-footed Falcon into the steppes of Orenburg, or if the latter has become rarer since the migration of the Lesser Kestrel into that country.

Near the Middle Ural river and the Lower Volga the Lesser Kestrel is not common; but it breeds throughout the whole country as far south as the delta of the Volga. At the end of August (old style) 1881, during my journey with Mr. Severtzov in the Khrenovskaja steppe (in the Government of Voronesh), there was obtained a young Lesser Kestrel (♂), the first specimen of that bird shot there during nearly forty years. But more to the south, in the steppes of the Government of Stavropol and near the northern slopes of the Caucasus, the bird is said to be very common. More to the west the Lesser Kestrel breeds in the steppes of New Russia and Bessarabia, in the Governments of Kiev, Podolsk, and Volhynia, and is still to be found in the south-eastern portions of Poland. According to Mr. Taczanovsky it is not an uncommon local bird in the Government of Lublin and near Radom; but is not found as far northwards as the latitude of Warsaw. It breeds in the Crimea, and a few stay there through the whole year.

TINNUNCULUS ALAUDARIUS.

The Kestrel is distributed throughout the greater part of Russia; but it is very common only in the middle and southern portions of that country.

In Finland this bird is found as far north as lat. 68°, but near its northern limit it is very rare; it is more common near the Gulf of Bothnia, and very common in the southern part of Finland. About Sego Lake, Lake Onega, and from there to the Dvina it breeds everywhere, but it is only an accidental visitor to the neighbourhood of Archangel. In the country about the Dvina its breeding-limit is north-eastern instead of northern; in that country it goes from Archangel to Ustug, from N.N.W. to S.S.E., and only from Ustug to the Upper Kama it is again northern. In the last-mentioned country the breeding-limit of the Kestrel follows nearly lat. 61°-60°. In Russia this bird is well known, except in the Kola peninsula and in the country near the Mezen river and the Pechora; but we believe that the obstacle to its breeding in these localities is the severity of the climate and the not sufficiently wooded character of the country. In all the central portions of Russia, as well as in the southern Governments, the Kestrel is very common. Near Astrakhan, in Bessarabia, and in some parts of the southern steppes it remains through the winter.

PANDION HALIAETUS.

The Osprey breeds throughout the whole of Russia from the Arctic Ocean to the Black Sea, the Caucasus, and the Caspian Sea; but it does not like close proximity to man, and for that reason is rare in the thickly populated districts. Another peculiarity of its distribution is that it must always be near water; and from these two causes it naturally follows that this bird is common only in a few parts of Russia; in general our country is poor in suitable localities for the Osprey.

It is common about the lakes of Finland, in the wooded country between the Gulf of Finland and the Upper Dnieper, on the lakes of the south-eastern slope of the Ural Mountains, and in a few other localities. It is rare in the central and southern portions of Russia.

It does not breed in the Crimea, but visits that country on migration.

CIRCAETUS GALLICUS and CIRCAETUS ORIENTALIS.

The Common and Steppe Short-toed Eagles are distinct from each other in their different ages, and in their geographical ranges present at least two races. The former has during its whole life a brown throat; the throat of the latter is always white, only streaked with shaft-stripes of brown. The former breeds throughout the region of "island woods"*; the latter is a bird of the steppes, where woods are very rare. But this difference of the breeding-ranges of the two birds exists only in Russia, and in that country I do not know that specimens of intermediate character between *C. gallicus* and *C. orientalis* occur; whereas near the Mediterranean the two races breed together, and specimens of intermediate character are very common. I think they are produced by the interbreeding of the two races.

The geographical distribution of these forms in Russia is as follows:—*C. gallicus* breeds throughout all the woods of Central Russia and on the western borders of the steppes, as far east as Semirechje: it is not uncommon about Vernoje. In Western Russia this bird breeds in Livonia, and has been found during the summer in Esthonia, as well as in the Government of St. Petersburg; but we do not know if it breeds in the two latter provinces. To the east the northern limit of distribution of *C. gallicus* is the Upper and Middle Volga as far as the mouth of the Kama; but it does not breed so far north, and is very rare in the country near the Volga. It is more common south of lat. 55°, common in Western Russia, rarer eastwards from the Dnieper. In Southern Russia it is found in Bessarabia, and in the Governments of Podolsk, Kiev, and Kharkov, and probably occasionally breeds throughout the whole country from the Governments of Tambov and Voronesh to the Ural.

C. orientalis is found at present in the steppes near the Ural river, near the mouths of the Volga and the Don, and in the steppes of New Russia; it is rare everywhere.

PERNIS APIVORUS.

The Honey-Buzzard breeds regularly in all the well-wooded districts of Northern and Central Russia; but it is a very local bird in the southern part of the country, and is only found on migration in the extreme south.

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* This term signifies woods surrounded by plains or fields, being a literal translation from the Russian.

It is rare in Finland, where it is found as far north as lat. 66°, and very rare near Archangel. In the country between the Dvina and the Kama its northern breeding-limit is unknown; but in the Government of Perm it is found only as far north as lat. 58°. It is common in Southern Finland, in the country near Lake Onega, in the Government of Ufa, and in Central Russia; but occurs only occasionally in the Baltic provinces and in Poland. In very large forests near Lake Peipus and in the wooded country of West Russia (Belorussia and Litra) this bird is not common. In the Ural branches, in the Government of Simbirsk, and westwards from the Don in the wooded districts of Little Russia and in the wooded river-valleys of New Russia, the Honey-Buzzard is very rare, though it breeds there as well as in the Pruth valley, Bessarabia. According to Mr. Severtzov, it was very rare in the Government of Voronesh until 1860; since that year it has become more common in the country, and now breeds there in all the forests which are large enough to afford it a retreat.

Near the mouth of the Ural river, at Sarepta, and in the Crimea the Honey-Buzzard has been only seen on migration.

BUTEO VULGARIS.

After a careful examination of many specimens of Buzzards from different portions of Russia, I am now firmly convinced that, contrary to the opinion of most ornithologists, the Common Buzzard is found only in the western and south-western parts of Russia, and that more northwards and eastwards it is replaced by the African Buzzard (*Buteo vulpinus*), its breeding-range in Russia being nearly the same as that of the Red Kite and Barn-Owl.

Without doubt the Common Buzzard breeds in the following localities of Russia:—in the Baltic provinces, in Poland (where it is common as far east as the Vistula and is rare eastwards from the Vistula, though it is still found in the district of Slonim, in the Government of Grodno), in Bessarabia, and near the borders of the latter country.

Near the east limit of the above-mentioned countries specimens are very common which are intermediate between the Common and African Buzzard, both in colouring and in dimensions. I think they are produced by the interbreeding of the two species.

I do not know for certain if the Common Buzzard breeds in Finland; but it is very possible.

BUTEO VULPINUS (*Buteo desertorum* auctor. plurim., nec *Buteo cirtensis,* Levaill. j.).

The African Buzzard is distributed throughout the whole of Russia. It breeds everywhere in the wooded country of Northern Russia, where the forests are more or less cut down (for example in the country between the Upper Volga and the mouth of the Dvina), is very common throughout Central Russia, and is not uncommon in the woods of Southern Russia; but it is not found either in the thickly wooded country of the Pechora or in the woodless southern steppes.

I have not seen specimens of the African Buzzard from Finland; but specimens of *Buteo* obtained by Mr. Sandeberg near Lake Onega being typical *B. vulpinus,* it is possible that throughout Finland both species breed—*B. vulpinus* as well as *B. vulgaris.* The western breeding-limit of the African Buzzard is nearly the same as the eastern breeding limit of the Common Buzzard, but only approximately. *B. vulpinus* occasionally breeds in the eastern portions of the range of the Common Buzzard, and the latter is a local breeding bird in the western portions of the range of the African Buzzard. The western breeding-limit of *B. vulpinus* near the Baltic Sea is the Vistula; but occasionally this bird visits the eastern portions of Northern and Southern Germany, having been found there more often during the last fifteen years. In the south-western portion of Russia also the two above-mentioned Buzzards are found together, interbreeding there as in the more northern parts, and the African Buzzard is not uncommon on the western shores of the Black Sea. Eastwards from the Ural Mountains the African Buzzard is distributed as far as Semirechje, being found breeding near Wernoje and near the Issyk-kul, where it meets with the Japanese Buzzard.

The African Buzzard is found in the Crimea and near Gurjev only on migration.

BUTEO FEROX.

The breeding-range of the Long-tailed Buzzard in Russia is still insufficiently known. It is a common breeding bird in the steppes near the Caspian Sea; but its northern and western breeding-limits are unknown. Mr. Severtzov has been told that in the country between the Ural and Flek rivers *Archibuteo lagopus* breeds; but Mr. Severtzov thinks that it is *Buteo ferox* which breeds there, whilst *Archibuteo lagopus* only visits that country during its winter migration. Mr. Sabaneev supposes that *Archibuteo lagopus* breeds in the district of Shadrinsk but this is probably a mistake. According to Mr. Henke the Long-tailed Buzzard is rare in the steppes between the Ural river and the Lower Volga, but is common west of the Volga. Mr. Severtzov obtained a specimen of this Buzzard in the steppe near the Biting river on autumn migration; and I have seen a specimen of it obtained $\frac{16}{4}$ December 1854 in the Crimea (Tamak), which is preserved in the Zoological Museum of Moscow. In Paris, in the excellent collection of Mr. Alléon, I saw three specimens of this bird obtained by that gentlemen in the Dobrudscha (♀ $\frac{4}{\text{IX}}$ 1882, ♀ $\frac{1}{\text{X}}$ 1882, ♀ $\frac{3}{\text{X}}$ 1882), and a fourth from the neighbourhood of Constantinople ($\frac{14}{\text{XI}}$ 1874). From these circumstances we infer that it is very possible that the Long-tailed Buzzard breeds in some parts of the steppes of Southern Russia west of the Don.

ARCHIBUTEO LAGOPUS.

The principal breeding-ground of the Rough-legged Buzzard is on the tundras beyond the wooded region, where only cover of birch and willow is to be found; but it is also a local breeding bird more to the south.

In Northern Russia the bird is common about the Varanger Fiord, on the coast of Murman, near Lake Enare, and generally in Lapland; and not uncommon in the tundras of the north-eastern country, from the Kanin peninsula throughout the Lower Pechora to the northern branches of the Ural. This Buzzard also breeds occasionally in many parts of the wooded country as far south as lat. 56°—a very interesting fact in the history of the Russian avifauna. It breeds, for example, near Lake Sego, near the Dvina, in the Government of Vologda. This bird has been found but rarely in the breeding-season in the Government of St. Petersburg, and, according to Mr. Russov, breeds irregularly in the Baltic provinces. Mr. Sabaneev says that the Rough-legged Buzzard breeds in the north-eastern portions of the Government of Jaroslav, and I have been told that it breeds in some parts of the Government of Vladimir (56°).

According to Mr. Bogdanov it is possible that it breeds in the districts of Syzran (in the Government of Simbirsk) and Belebejev (in the Government of Ufa) (lat. 54°–53°).

On the autumn and spring migration the Rough-legged Buzzard is a common visitant to Middle Russia, where a few specimens remain all the winter through; but its winter-quarters are in Southern Russia, where it strays as far south as the mouth of the Volga and the Crimea.

AQUILA FULVA, AQUILA CHRYSAËTOS, and AQUILA NOBILIS.

After a careful examination of many specimens of the Golden Eagle from different parts of the Palæarctic Region, Mr. Severtzov established three typical forms of this Eagle :—

Aquila fulva.	*Aquila chrysaëtos.*	*Aquila nobilis.*
The young of *A. fulva* have the white on the base of the tail, but this character disappears with the advance of age, and the tail of the adult Eagle is dark.	The young of *A. chrysaëtos* have not the white on the base of the tail; the tail of the young Eagle is as dark as that of the adult.	The white on the base of the tail is a permanent character of the young and adult of *A. nobilis.*

The first form of the Golden Eagle (*A. fulva*) does not breed in Russia, but near the western limit of the country in the Carpathian Mountains*.

The second form of the Golden Eagle (*A. chrysaëtos*) is distributed throughout the whole wooded country of North Russia as far west as Sweden, and as far east as Lake Baikal. The southern breeding-limit of this species is as follows:—In the Baltic provinces *A. chrysaëtos* breeds as far south as the Dvina river; more east, in the Government of Vitebsk, its breeding-limit crosses that river and comprises the whole wooded country of Litua. From there the southern limit of the breeding-range of *A. chrysaetos* goes across the Dnieper northwards from Kiev (near lat. 52°), across the Desna river northwards from Chernigov and across the Oker between the towns Orel and Kaluga (near lat. 53°). More to the east the breeding-limit of *A. chrysaëtos* is insufficiently known; it probably breeds throughout the large woods of the northern parts of the Governments of Tambov and Pensa, along the right coast of the Oka, and between the mouths of the Oka and Kama. From the mouth of the last-mentioned river the southern breeding-limit of *A. chrysaëtos* runs along the Kama as far as the mouth of the Belaja river, and thence in a S.S.E. direction. Mr. Severtzov saw in the Museum of Orenburg many specimens of this Eagle obtained in the country of the Upper Belaja, Ik, and Sakmara, and from the southern Ural Mountains (as far south as lat. 52°). North of the above-mentioned limit *A. chrysaëtos* breeds everywhere as far as the limit of forest-growth; south from that limit it is only a rare stranger during its winter migration.

The third form of the Golden Eagle (*A. nobilis*) breeds throughout the woods of Middle Russia, and occasionally in the wooded country of Northern Russia as far as Mezen and lat. 60° in the Ural Mountains. Southwards it breeds as far as the Governments of Podolsk, Kiev, Poltava, Kharkov, Voronesh, and Saratov; but in all these places it is rare and local. East of the Volga it is a common breeding bird in the forests between that river and the Ural Mountains, and probably breeds in some parts of the steppes between the Volga and Ural rivers. It does not breed in the steppes of New Russia, nor in the steppes between the Don and the Volga, but is found there during the winter, and is resident in the Crimea. According to Mr. Taczanovsky, twenty years ago this Eagle bred in Poland, but now is only a winter visitor to that country.

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* Mr. Schalow has mis-stated the breeding-district of *Aquila fulva* as the Ural Mountains instead of the Carpathian Mountains (Journ. f. Orn. 1883, p. 410).

AQUILA IMPERIALIS.

The Imperial Eagle is essentially a lover of the plains near the large forests, and breeds only on the steppes of Russia; but occasionally it strays as far north as the central governments.

In the Ural Mountains this bird is found as far north as lat. 56°, breeding (on the authority of Mr. Martin) in the vicinity of Ekaterinburg. Mr. Pleske informs me that this Eagle is common in the district of Orenburg, and that in August 1872 he met with many specimens of it in the district of Sterlitamak (in the Government of Ufa). According to Eversmann it is common in the branches of the Ural and in the steppes near them, but according to Mr. Henke it is somewhat rare near Astrakhan. West of the Volga the Imperial Eagle is a common breeding bird in the Governments of Simbirsk, Saratov, Voronesh, Kharkov, Kiev, and Podolsk, as well as in the steppes of New Russia and in the Crimea.

As an occasional visitor the bird is found in the Governments of Riazan, Tula, Moscow, Tver, and Pskov, in the Baltic provinces, in Poland, and in Lithuania.

On migration the Imperial Eagle follows the great route from the Volga to the Lower Don, along the coasts of the Azov Sea, and along the northern and western coasts of the Black Sea. But we do not know any thing of its migration throughout South-eastern Russia, from the Ural Mountains to the mouth of the Ural river and along the coast of the Caspian Sea.

Aquila orientalis, A. glitschii, and A. bifasciata.

According to Mr. Severtzov, throughout the steppes of Southern Russia and Western Asia two forms of the Steppe-Eagles breed, a third being found more to the east. These forms are *A. orientalis, A. glitschii,* and *A. bifasciata.*

A. orientalis.	*A. glitschii.*	*A. bifasciata.*
Adult bird uniform dark brown, with the addition of a fulvous-coloured nuchal patch.	Adult bird earth-brown, with the addition of a fulvous-coloured nuchal band and a pale fulvous band across the lower back; primaries, secondaries, and tail-feathers barred.	Adult bird earth-brown, with double bars on the wings and fulvous-coloured upper and lower tail-coverts; primaries, secondaries, and tail-feathers not barred.
The first plumage of this Eagle is earth-brown, mottled with pale fulvous on the lower back, middle scapulary region, little and middle wing-coverts, breast, and abdomen; the great wing-coverts and secondaries with large terminal patches of fulvous; the upper and lower tail-coverts fulvous. After the first moult the fulvous patches of all the feathers more or less disappear, with the exception of those on the greater wing-coverts and secondaries. After the second moult the plumage is nearly uniform, but double bars across the wing and traces of fulvous on the tail-coverts exist until the fourth moult, at which the bird receives its adult plumage.	The first plumage of this Eagle is nearly uniform earth-brown, with terminal fulvous patches on some of the greater wing-coverts; secondaries and tail-feathers terminated with the same colour; tail-coverts fulvous, the lower irregularly barred with brown. After the first and second moults the bird becomes more and more uniform earth-brown; but a fulvous-coloured nuchal band and a pale fulvous band across the lower back are developed with the third and fourth moults.	The first plumage of this Eagle is earth-brown, with double bars on the wings, but without the patches on the other regions of the body; the second plumage is mottled with fulvous. After the third and fourth moults the bird becomes uniformly coloured, and receives its adult plumage, only with double bars on the wing.

I am indebted to the kindness of Mr. Severtzov for the following notes on the geographical distribution of the three above-mentioned Steppe-Eagles:—

"The geographical distribution of the three species of Steppe-Eagles, *Aquila orientalis, Aq. glitschii, Aq. bifasciata,* generally is such that each of those birds replaces in its *habitat* the others, their breeding-ranges being narrow regions going from W.S.W. to E.N.E. Also, if we travel from W. to E. (for example, from Ruschuk to Perovsk, across the Lower Danube, Dnieper, Don, Volga, and Syr), and from N. to S. (for example, from Troizk to Tashkent), we shall find the same succession of the regions of the three above-mentioned species of Eagles: at first we shall find the breeding-range of *Aq. orientalis,* after it that of *Aq. glitschii,* and at last that of *Aq. bifasciata.*

"*Aquila orientalis* breeds as far west as the country near the mouth of the Danube (Dobrudscha), from which I saw a nestling in the Museum of Vienna. Naumann received this species from the district of Dnieper, in the Government of Taurida. The original specimen of Cabanis, and many others, were obtained in spring and summer in the hills near the river Sarpa, beyond Sarepta. A specimen in my collection (♂ ad.) was obtained at the end of August near the Lower Ural river, at the fore-post Krasnojarsk; another, a young one, was found in the beginning of September more to the north, near Stanitga Sakharnaja. I also obtained a young specimen, and several times have observed the adult birds of this species in the steppes of the Government of Voronesh, in the district of Burreluk (in the Government of Samara), near the mouth of the Uy (lat. 55°), and near the river Irtysh, 150 versts from Semipalatinsk.

"I think there is no doubt that the Eagles supposed by Nordmann to be *A. nævia,* which breed on the ground throughout all the steppes of Southern Russia west of the Don, are not *A. nævia*: *probably* they are *A. orientalis.* But it is possible that Nordmann observed not only *A. orientalis,* but also *A. glitschii,* if this latter breeds west of the Don, regarding which we do not yet know any thing.

"On migration this species was observed in great numbers, together with *A. glitschii,* in the vicinity of Constantinople by Mr. Alléon, who erroneously named them *A. clanga,* Pall., and *A. nævioides,* Cuv.; but we do not know the winter-quarters of *A. orientalis.*

"*A. orientalis* has been once obtained in the Government of Moscow.

"*Aquila glitschii* was probably found by Gmelin in the steppes near the Lower Don; but Gmelin's description being insufficient, we cannot be certain of the identification. Mr. Shatilov obtained a specimen of *A. glitschii* in the Crimea (♀, IX. 1854), probably on migration. It is numerous about the Sarpa, where it is more common than *A. orientalis,* with which it is mingled there. Mr. Artzibashev has furnished specimens of this Eagle from the steppes of Astrakhan. I have found and obtained specimens of *A. glitschii* in the steppes near the river Ural, as far north as 400 versts from the mouth, in the steppes near the river Emba, and in the country between the Syr-Darja and Turgai (meridian of Perovsk). A young specimen in my collection was obtained in the hills north of Kuldscha (lat. 73°); an adult specimen was furnished by Mr. Karelin for the Zoological Museum of Moscow from the river Ajaghuz (lat. 48°), and many others were obtained by General Kolpakovsky in Semirechje (now preserved in the Zoological Museum of Moscow).

"I infer from these facts that the breeding-range of *A. glitschii* extends from the Lower Don to the Black Irtysh, across the Lower Volga, Ural, and the middle portion of the Kirghiz steppes. From the river Ajaghuz its principal breed-range extends throughout the breeding-range of *A. bifasciata,* along the foot of Tarbagatai, Barlyx, Simirechensky Alatau, and Erin-khabargha as far as Kuldscha.

"On migration this Eagle was observed by Mr. Alléon near Constantinople (the route to the Don and the Volga). I found it on the route of migration which goes round the northern and western foot of the Tian-shan, from Aulje-ata across Tchimkent to Tashkent; and probably it is the same species that I observed on migration across Karakum, near the north-eastern angle of the Aral Sea; but in the distance I could not distinguish it from *A. clanga*.

"I have a specimen of *A. glitschii* obtained by Mr. Anderson in winter between the Sutluj and Ganges, near the southern foot of the Himalaya; it is very like that obtained in the Kirghiz steppes north of Perousk; but we do not know any thing more of the winter-quarters of *A. glitschii,* though it doubtless winters west of North-western India.

"*Aquila bifasciata* was not found by me west of the Aral Sea. I saw many young specimens dead which had been taken from nests near the stations of the route from Orenburg to Tashkent, near the north-east angle of the Aral Sea, and near Dschulek (on the Syr-Darja, 600 versts from the mouth). The specimens in my collection were obtained during migration near Aulje-ata, Tchimkent, and Tashkent, but I did not find this Eagle during the summer in the steppes near the foot of the Tian-shan. The nests, which I know, were found in the bushes of saxaul near the Syr, and more to the north, near the north-eastern angle of the Aral Sea. Probably it breeds also near the Tohu; and Colonel Prjevalsky has found this Eagle in summer sparingly distributed throughout the bushes of saxaul in the Alashan and near the frontier of China.

"On migration I have several times obtained *A. bifasciata* at Aulje-ata, Tchimkent, also more southwards near Tashkent, and on the Lower Amu.

"This Eagle winters in Northern India, whence I have specimens obtained by Mr. Anderson. By Colonel Prjevalsky it was found during the winter in the high steppes near the Lake Khu-khu-nor, where it is very cold, but snowless; there it feeds on *Lagomys* and the other species of *Glires*."

AQUILA CLANGA.

The Larger Spotted Eagle breeds throughout the wooded districts of Russia from lat. 60° as far south as the southern limits of forest-growth. A specimen of this bird was obtained by Mr. Paljakov near Lake Onega, but it only occasionally straggles to that northern country. According to Mr. Russov it is a rare breeding bird in the Baltic provinces, where its more western representative, the Lesser Spotted Eagle, is more common. In the Governments of Tver, Jaroslav, Moscow, Tula, and Orel, the Larger Spotted Eagle is more common, and it is very common in the woods of Eastern Russia, from the Oxa river to the Ural Mountains. In the Ural Mountains and their branches the bird is found from lat. 60° to lat. 55°, but generally its southern breeding-limit in Russia is but little known. On the wooded islands of the Volga it breeds as far south as lat. 50°, and probably still more to the south. According to Mr. Severtzov it is a breeding bird in the forests of the river-valleys in the Government of Voronesh. More to the south-west it is probably a rare breeding bird in the Government of Kharkov, and, without doubt, breeds in the woods of the Government of Kiev; but in the steppes of New Russia it is replaced by *Aquila orientalis*. In Western Russia, from the Upper Dnieper to Poland, it breeds everywhere, but is rare.

AQUILA NÆVIA.

The Lesser Spotted Eagle is met with only in the western parts of Russia; it is a very typical member of the avifauna of Western and Southern Europe, and generally is found in the same country as the Common Buzzard, the Red Kite, and the Barn-Owl.

According to Mr. Mela the Lesser Spotted Eagle is a rare occasional visitor to the eastern shores of the Gulf of Bothnia. My friend Mr. Pleske informs me that this bird has been once found in the district of Vyshny-Voloschok (in the Government of Tver). It is more common in the Governments of Pskov and St. Petersburg, and breeds everywhere in the Baltic provinces. According to Mr. Taczanovsky it is a breeding bird in Poland, and, on the authority of Mr. Pleske, is common and breeds in the Government of Grodno. More to the south it breeds in the Governments of Podolsk, Kiev, and in Bessarabia, and probably in the whole wooded country between Lake Peypus and the Upper Dnieper. In all the above-mentioned localities the Lesser Spotted Eagle breeds together with its somewhat larger representative, *Aquila clanga*; but it is more and more rare in proportion as it recedes from the shores of the Baltic Sea, and the eastern race is, on the contrary, more and more rare in proportion as it approaches it.

The Lesser Spotted Eagle is sedentary only in the south-western parts of Russia.

Mr. Kalenichenko informs us that *Aquila nævia* is found "rariter in montibus Tauriæ ad Czatyrdach." I have not seen a specimen of the Spotted Eagle from the Crimea; but it is not impossible that it is really the Lesser Spotted Eagle that breeds in the mountain-woods of that peninsula, as it is this and not the other species which has been obtained in the Caucasus*.

AQUILA BONELLII.

Bonelli's Eagle is only a very rare and accidental visitor to the southern parts of Russia.

According to Mr. Nordmann it was once met with near Odessa. Mr. Severtzov informs us, on the authority of one of his friends, that this bird has been found in the Government of Voronesh. An example of it has been obtained near Sarepta.

Mr. Goebel tells us that a specimen of Bonelli's Eagle was observed by him in the district of Uman (in the Government of Kiev); but this specimen was not obtained, and "die leuchtenden Schulterflecken," mentioned by Mr. Goebel, give us very great doubts in deciding whether the observed bird was really a Bonelli's Eagle.

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* Mr. Seebohm informs us (Ibis, 1883, i. p. 3) that in the mountain-valleys of the northern slopes of the Caucasus the Larger Spotted Eagle breeds. But, according to Mr. Bogdanov, in the above-mentioned country the Lesser Spotted Eagle breeds; and Mr. Severtzov, the most competent judge of the identification of the Eagles, told me that the specimen in Bogdanov's collection was really *Aquila nævia*, and not *Aquila clanga*. But two males in Mr. Seebohm's collection from Lenkoran are unquestionably *A. clanga*.

AQUILA PENNATA and AQUILA MINUTA.

I think that *Aquila pennata* is distinct from *Aquila minuta*, with which it, however, regularly interbreeds.

The Booted Eagles are not uncommon in Southern Russia, but are very local in the central part of that country.

According to Mr. Kaplick they are found in the district of Tikhrin (in the Government of Novgorod). I once found the Booted Eagle in the Government of Tula. Mr. Severtzov informs me that, on the authority of Mr. Bakunin, this bird was probably observed in the Government of Kazan, near the limit of the district of Bugulma. According to Mr. Sabaneev they are found in the Ural Mountains south of lat 57°. They probably breed in the wooded parts of the country between the Volga and the Ural rivers, and doubtless also in the Governments of Voronesh, Kharkov, Kiev, Podolsk, and Volhynia, where they are not uncommon. Mr. Taczanovsky records these birds as being rare in Poland. In the south of Russia Booted Eagles have been observed in the wooded districts of the steppes of the Black Sea, as well as in the Crimea, and doubtless breed in both localities.

Mr. Karelin has obtained this species near Guriev at the end of August (old style), probably on autumn migration. It is common on spring and autumn migration in the Crimea, especially in the autumn.

HALIAETUS ALBICILLA.

The White-tailed Eagle is a more or less common breeding bird throughout the whole of Russia, with the exception of the central governments, where it is very rare. The northern examples of this bird migrate south during the autumn to Southern Russia, where they meet with the resident birds of the latter country, and consequently the White-tailed Eagle is very common during the winter in Southern Russia. It is not uncommon also during the winter in Western and South-eastern Russia, but is very rare more to the north.

HALIAETUS LEUCORYPHUS.

Pallas's Sea-Eagle is doubtless found in South-eastern

Russia along the coasts of the Caspian Sea, but its western limit is somewhat difficult to trace.

According to Mr. Severtzov, Pallas's Sea-Eagle is to be met with in the steppes of the Caspian Sea as far north as Uralsk and Busuluk (the Samara river). It is very common near the Lower Ural river, especially between the Kalmikova and the sea; but, on the authority of Mr. Severtzov, in the Caspian steppes there is no place where it regularly breeds. According to Mr. Henke, Pallas's Sea-Eagle is occasionally found on the steppes of the Lower Volga, where it breeds *on the ground.* This bird was once seen by Bogdanov at the end of September in the delta of the Terek. According to Col. Irby it is common in the interior of the Crimea, but is not seen among the rocks by the coast. This bird bred, on the authority of Col. Irby, in two instances, *on trees* close to the Kacha river; but I have never seen any example of Pallas's Sea-Eagle in collections of birds from that country, and never observed it during my two journeys in the Crimea. Mr. Kalenichenko states that it is a rare bird in the Government of Kherson, near the Bug, and along the coasts of the Black Sea. Mr. Nordmann supposes that he has had a young bird of this species from the Bug; and a probable instance of its having nested still further westward, in the Pravidy valley, Bulgaria, has been recorded by Mr. Farman. But Messrs. Elwes and Buckley did not observe Pallas's Sea-Eagle in Turkey, though they searched all the localities Mr. Farman mentions; and Mr. Alléon did not obtain it, either near Constantinople or in the Dobrudscha.

Milvus regalis.

Like the Common Buzzard, the Red Kite is a bird exclusively confined to the western Palæarctic Region. It is rare in Russia, where it is found only in the western and south-western parts of the country.

It breeds in Livonia and Western Courland, but it only occasionally occurs in Esthonia. Mr. Taczanovsky records the Red Kite as being common and migratory in Poland, and this bird probably breeds in the district of Belsk (in the

Government of Grodno); but it is a very rare accidental visitor to Central Russia, being found there only as far east as the Governments of Tula and of Orel. In the southern portions of Russia the Red Kite doubtless breeds in the district of Uman (in the Government of Kiev), in the district of Balta (in the Government of Podolsk), near the Dnieper, and generally in the steppes of the Black Sea west of the Dnieper. In the last-mentioned part of Russia and in Bessarabia the Red Kite is very common, though it is seen but rarely in the Crimea.

Mr. Severtzov, in his 'Fauna of the Government of Voronesh,' says the Red Kite was observed by him several times in that country; but Mr. Severtzov now tells me that he was probably mistaken, and that the Red Kites of his 'Fauna' were only rufous and deeply forked-tailed examples of *Milvus ater*. Pallas says the Red Kite winters on the Lower Volga; according to Eversmann it occasionally occurs about the lower part of this river; and Mr. Sabaneev states that he has seen several Red Kites, amongst hundreds of *Milvus ater*, flying towards some dead animals in the Kaslinsky Ural. But it is a mistake: no one has ever seen Red Kites in the country between the Government of Tula, the Ural Mountains, and the Lower Volga; not one skin of *Milvus regalis* has ever been obtained from Russia east of the Don.

"Kites were observed at Cholmogory and elsewhere, usually near towns and villages," Messrs. Alston and Harvie Brown inform us, in their 'Notes from Archangel.' "We did not obtain any specimens, but believe them to have been of this species (*M. regalis*), which was the one procured by Lilljeborg and Meves." I ought to say that Messrs. Lilljeborg and Meves procured in North Russia only *Milvus ater*; and as *Milvus regalis* certainly does not exist in Finland, I think the *Milvus regalis* of Messrs. Alston and Harvie Brown is really our common *Milvus ater*.

Milvus ater.

The Black Kite is very common throughout the whole of

Southern and Central Russia, and is not uncommon in the middle portion of Northern Russia, from the Upper Volga to Archangel, and from Lake Onega to the Dvina. In Finland it is only an occasional visitor to the northern and north-eastern shores of the Gulf of Finland, and was never obtained in any other part of the country, being very rare near the western coast of Lake Onega. From the Dvina to the Ural Mountains its breeding-limit is unknown; but in the last-mentioned mountains it is found as far north as the Bogoslovsky Ural.

Eastwards from the Ural Mountains the Black Kite is found as far as Semirechje; but, on the authority of Mr. Severtzov, it is rare in that country in comparison with *Milvus govinda*, which is distributed as far west as the Ural Mountains. The proportionate number of the two species in the country between the Ural Mountains and Semirechje is distinctly contrasted, *Milvus govinda* being rare near the eastern slopes of the Ural, and becoming more and more common as it approaches Semirechje; *Milvus ater* being common in the Ural and near it, but becoming more and more rare in proportion as it retreats from the same country.

In the Ural Mountains, amongst the typical specimens of the Black Kite are found many specimens of a Kite with intermediate characters between the two extremes—*Milvus ater* and *M. govinda*; and a specimen of the same character was obtained in the Government of Kostroma, where *Milvus govinda* had never been found. East of the Ural Mountains are found specimens which are between the intermediate form and one of the two extremes, *Milvus govinda*; but specimens between the intermediate form and the other extreme, *Milvus ater*, have never been obtained, though the latter is distributed throughout that country as well as its more eastern representative. On that ground it is very possible that these specimens are not produced by the interbreeding of the two extremes, but represent the not extinct intermediate form between *Milvus ater* and *Milvus govinda*, which are only subspecifically distinct.

In the western parts of Russia the Black Kite breeds, together with the Red Kite, but is very rare in some districts of that country. In the Baltic provinces it nests in the eastern part of Livonia, and is a rare breeding bird in Courland; but it is only occasionally found throughout the other parts of the country, where the Red Kite is more common. In Poland, according to Mr. Taczanovsky, the Black Kite is more common east of the Vistula, and the Red Kite, on the contrary, is more common west of that river. More to the south, in South-western Russia, and near the northern coast of the Black Sea, the bird generally is common, but in the Crimea it is found only on migration.

MILVUS GOVINDA.

Since the publication of my 'Ornithological Geography' I have seen a very typical specimen of *Milvus govinda* from the Serebrianka river (in the Government of Perm), and we shall probably be obliged to enlarge the breeding-range of this Kite as far west as the western slopes of the Ural Mountains. This bird has been found throughout the whole country from Semirechje to the last-mentioned mountains.

On migration *Milvus govinda* has been obtained several times by Mr. Alléon on the Balkan peninsula.

MILVUS GLAUCOPUS.

The Blue-footed Kite was discovered by Eversmann. In colouring and dimensions it is a very near relative of *Milvus govinda*, from which it can be easily distinguished by having blue feet and a blue cere. Mr. Severtzov supposes it is an atavistic form of *Milvus govinda*.

We know at present of but very few specimens of this bird, obtained in the Government of Orenburg, in Ust-Urt, and about the Lake Zaysan.

ASTUR PALUMBARIUS.

The Goshawk is distributed throughout almost the whole of Russia, from the limit of forest-growth in the north to the Black Sea, the Caucasus, and the Caspian Sea in the south. Generally it is nowhere very common; but in the central and northern governments it is more common than in the other parts of the country, but is very rare near its northern breeding-limit and in Southern Russia.

It is resident in every part of its breeding-range, with the exception of the extreme north, where it is partially migratory. In North-east Russia, from the Government of Kostroma to the Ural Mountains, and probably more east, amongst the typical specimens of the Goshawk are found birds with a more or less developed white colour. Some specimens of this variety are all over of a very light colour, almost white; others, being generally of the normal grey, have large white spots on different parts of their plumage. This albinoid variety is probably produced by the difference of climate of North-eastern Russia in comparison with that of Western Europe; and I think these more or less white specimens show us that the same relation exists between *Astur palumbarius* and *Astur candidissimus* as between *Pœcile palustris* and *Pœcile kamtschatkensis, Picus major* and *Picus major kamtschatkensis, Picus minor* and *Picus minor kamtschatkensis,* &c.

ASTUR BREVIPES.

The breeding-range of the Levant Sparrow-Hawk in Russia appears to be very little known.

On the authority of Mr. Karelin it is rare in the country about the Ural river; and Mr. Henke tells us that it is occasionally found breeding in the poplars in the vineyards near Astrakhan. According to Mr. Severtzov it breeds and is a partial resident in the Government of Voronesh. I think I have seen the Levant Sparrow-Hawk several times in the Crimea, on the south coast, in July and August of 1882; but as it was not obtained, it was impossible to identify the bird.

According to Mr. Severtzov it is found during the autumn migration near the mouth of the Ural river.

ACCIPITER NISUS.

Like the Goshawk, the Sparrow-Hawk is distributed throughout the whole wooded country of Russia, but is a more regular visitor than that bird. The northern examples do not pass the winter in their breeding-range and regularly migrate southwards during the autumn; those from Middle Russia are only partially migratory, a few remaining there throughout the whole winter; and in Southern Russia the bird is rare during the summer, and is more common on migration and in the winter.

Generally the Sparrow-Hawk is more common everywhere than the Goshawk, and is very common in some parts of Central Russia. According to Mr. Shatilov it is resident in the Crimea.

STRIGICEPS CYANEUS.

The Hen-Harrier is distributed throughout the whole of Russia as far north as lat. 68° and 69°, but is very rare near its northern breeding-limit, and is more common only south of lat. 62°. This bird is very common in Central and Southern Russia.

In the steppes near the Lower Ural river, the Lower Volga, in the steppes of New Russia, and in the Crimea, the Hen-Harrier is found during the whole winter.

STRIGICEPS PALLIDUS.

The Pallid Harrier breeds only throughout the southern parts of Russia, but as an irregular straggler it is found further north. According to Mr. Sabaneev, it is found in the steppes south of Ekaterinburg; and Mr. Pleske informs me that this bird is common in the district of Orenburg. On the authority of Mr. Karelin it is found in the steppes near the Ural river, and by Mr. Bogdanov it was observed in the district of Balashev (in the Government of Saratov), in the Government of Stavropol, and in the valleys of the Terek and Kuban. It is not uncommon in the Government of Voronesh, is found in the Government of Kiev and near the border of the Government of Kherson, and breeds throughout all the steppes of the Black Sea. According to Mr. Schatilov it occurs in the Crimea; and Mr. Henke tells us that a few specimens of this species are found all the year round at Astrakhan. At the end of summer I have several times obtained young specimens of the Pallid Harrier in the Governments of Orel and Tula, and Mr. Lorenz has furnished me with specimens from the Government of Moscow; but I think it does not breed there, because not one adult specimen has been obtained by us in these localities.

According to Mr. Mela it is a very rare and accidental visitor to the northern coast of the Gulf of Finland.

STRIGICEPS CINERACEUS.

Montagu's Harrier is found in all parts of Southern and Middle Russia. In the Ural Mountains it is distributed as far north as Ekaterinburg; in the country between Ekaterinburg and the mouth of the Kama its northern breeding-limit is unknown, but it is a common breeding bird in the district of Birsk (in the Government of Ufa). According to Mr. Bogdanov it is found in the Government of Kazan. On the authority of Mr. Pavlov, Montagu's Harrier is a rare breeding bird in the Government of Riazan. In the country adjoining the Government of Moscow the bird is rare, though it breeds everywhere in suitable localities. According to Mr. Russov it breeds in the Baltic provinces. Generally its northern breeding-limit in Central Russia is represented by the Volga from the mouth of the Kanin to the mouth of the Mologa. In the country between the mouth of the last-mentioned river and the Gulf of Finland the northern breeding-limit of Montagu's Harrier is unknown; but the species is found rarely in the Governments of Tver and St. Petersburg, and strays as far the northern coast of the Gulf of Finland.

A few examples of this bird are found all the year round in the steppes of Southern Russia and in the Crimea.

CIRCUS ÆRUGINOSUS.

The Marsh-Harrier is distributed throughout the whole of Russia as far north as Archangel, with the exception of Lapland, Finland, and the north-eastern country from the Dvina to the Ural Mountains, but it is rare north of the Volga. In the Ural Mountains its northern breeding-limit is about lat. 58°. In some parts of Middle and Southern Russia this bird is very common. In the steppes of Southern Russia a few Marsh-Harriers are found all the year round.

XXXIV.—*On a Collection of Birds made in Southern Palawan by Mr. E. Lemprière.* By R. Bowdler Sharpe, F.L.S., F.Z.S., &c., Department of Zoology, British Museum.

(Plate VIII.)

The contributions to our knowledge of the avifauna of the island of Palawan are two in number, viz.:—my own paper on the birds collected by Professor J. B. Steere in the Philippine archipelago, published in the 'Transactions of the Linnean Society' (second series, Zoology, vol. i. pp. 307–355); and Lord Tweeddale's account of the collections made by Mr. Everett (P. Z. S. 1878, pp. 611–624). The chief interest attaching to Mr. Lemprière's collection arises from the fact that it has been made in a portion of the island yet unvisited, and that, as will be seen, it not only contains examples of many of the species discovered by Professor Steere and Mr. Everett, but also brings to our knowledge one or two undescribed kinds of birds.

Cacatua hæmaturopygia (Müll.).

Cacatua hæmaturopygia (Müll.); Sharpe, *t. c.* p. 312; Wardlaw Ramsay, Orn. Works Marq. Tweed. p. 655.

New to Palawan.

Tanygnathus luconensis (L.).

Tanygnathus luconensis (L.); Sharpe, *t. c.* p. 312; Tweedd. *t. c.* p. 612; Wardlay Ramsay, *t. c.* p. 655.

Procured by Prof. Steere and Mr. Everett.

Centrococcyx eurycercus (Blyth).

Centrococcyx eurycercus (Blyth); Tweedd. *t. c.* p. 614; Wardlaw Ramsay, *t. c.* p. 656.

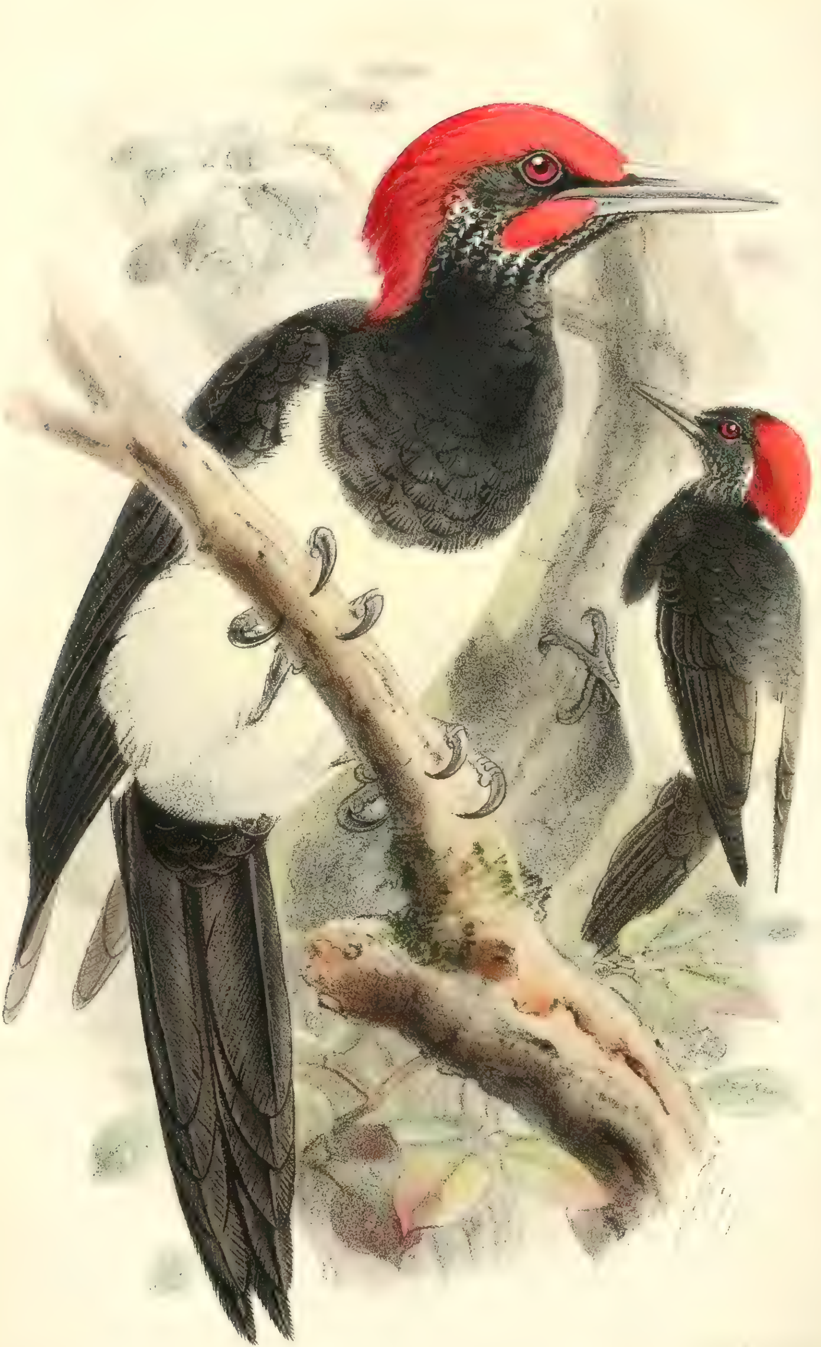
Found also by Mr. Everett.

Dryococcyx harringtoni, Sharpe.

Phœnicophaes harringtoni, Tweedd. *t. c.* p. 613; Wardlaw Ramsay, *t. c.* p. 656.

Several specimens. This species was discovered by Prof. Steere, and afterwards found by Mr. Everett at Puerto Princesa.

Ibis, 1884. Pl. VIII



J. G. Keulemans lith. Hanhart imp.

THRIPONAX HARGITTI

Lord Tweeddale was inclined to regard the structural difference in the nostrils as of specific rather than generic importance.

CHRYSOCOLAPTES ERYTHROCEPHALUS, Sharpe.

Chrysocolaptes erythrocephalus, Sharpe, *t. c.* p. 315; Tweedd. *t. c.* p. 612; Wardlaw Ramsay, *t. c.* p. 655.

A fine adult male.

TIGA EVERETTI, Tweedd.

Tiga everetti, Tweedd. *t. c.* p. 612; Wardlaw Ramsay, *t. c.* p. 655.

Tiga javanensis, Sharpe, *t. c.* p. 315 (nec Ljungh).

It will be noticed that in my paper on Prof. Steere's birds I doubted the identity of the Palawan *Tiga* with the Bornean *T. javanensis.* The only specimen brought by Prof. Steere from Palawan was in poor condition, and I did not like to separate the bird specifically; but Lord Tweeddale has since named it *Tiga everetti,* and Mr. Lemprière's series amply confirms the distinctness of the Palawan species.

THRIPONAX HARGITTI, sp. n. (Plate VIII.)

Thriponax javensis, pt.; Sharpe, *t. c.* p. 314.

Three specimens of this large black Woodpecker, which I am afraid I wrongly identified in 1876, when Prof. Steere procured in Palawan an example which I referred to *T. javensis.* On showing Mr. Lemprière's skins to my friend Mr. Hargitt, the latter gentleman pointed out to me that they could not belong to *T. javensis,* as they had a white rump, whereas *T. javensis* is entirely black above. The white rump is a character peculiar to a section of the genus *Thriponax,* and therefore the nearest ally of the Palawan Black Woodpecker is *Thriponax feddeni* of Burmah. It may, however, be distinguished from the latter species by its perfectly black primaries. The Palawan Woodpecker may therefore be diagnosed as follows:—

THRIPONAX HARGITTI, sp. n.

T. similis *T. feddeni,* sed primariis basaliter nigris distinguendus: long. tot. 16·5, culmen 2·15, alæ 8·3, caudæ 6·6, tarsi 1·45.

I have ventured to attach to this species the name of Mr. Edward Hargitt, who is doing such excellent work with the Picidæ.

ALCEDO BENGALENSIS, Gm.

Alcedo bengalensis, Gm.; Wardlaw Ramsay, *t. c.* p. 655.

New to Palawan.

PELARGOPSIS LEUCOCEPHALA (Gm.).

Pelargopsis leucocephala (Gm.); Sharpe, *t. c.* p. 317; Wardlaw Ramsay, *t. c.* p. 655.

Two specimens. Found by Prof. Steere in the island.

CEYX RUFIDORSA, Strickl.

Ceyx rufidorsa, Strickl.; Sharpe, Monogr. Alced. pl. 41.

New to the Philippine group.

CORONE PUSILLA (Tweedd.).

Corvus pusillus, Tweedd. *t. c.* p. 622; Wardlaw Ramsay, *t. c.* p. 658.

Several specimens in the collection. I think, in contravention to the opinion of the late Lord Tweeddale, that this is one of the races of *C. enca*. The wing varies from 9·3 to 10·4.

BUCHANGA LEUCOPHÆA (V.).

Buchanga leucophæa (V.); Tweedd. *t. c.* p. 615; Wardlaw Ramsay, *t. c.* p. 656.

Buchanga cineracea, Sharpe, *t. c.* p. 324.

Already obtained in Palawan by Prof. Steere and Mr. Everett.

CHIBIA PALAWANENSIS (Tweedd.).

Dicrurus palawanensis, Tweedd. *t. c.* p. 614; Wardlaw Ramsay, *t. c.* p. 656.

This species appears to me to be distinct, as the specimens bear out the observations of Lord Tweeddale, who possessed a special knowledge of these puzzling birds. The lanceolate spangles on the fore neck, however, will distinguish it from *C. pectoralis*, like which species it has the throat unspotted.

ORIOLUS PALAWANENSIS.

Broderipus palawanensis, Tweedd. *t. c.* p. 616; Wardlaw Ramsay, *t. c.* p. 657.

Three specimens, which bear out the characters of the species as defined by Lord Tweeddale. In two of them the wing measures 5·9 inches, in the third 5·6.

ARTAMIDES SUMATRENSIS (S. Müll.).

Artamides sumatrensis (S. Müll.); Sharpe, Cat. B. iv. p. 12.

Graucalus sumatrensis, Sharpe, *t. c.* p. 323; Tweedd. *t. c.* p. 614.

Examples of both sexes are in the collection.

PERICROCOTUS IGNEUS, Blyth.

Pericrocotus igneus, Blyth; Sharpe, *t. c.* p. 324; Wardlaw Ramsay, *t. c.* p. 656.

Found only by Prof. Steere, and not by Mr. Everett.

PERICROCOTUS CINEREUS, Lafresn.

Pericrocotus cinereus, Lafresn.; Sharpe, Cat. B. iv. p. 83; Wardlaw Ramsay, *t. c.* p. 656.

Recorded by Capt. Wardlaw Ramsay in his Systematic Catalogue as from Palawan, but I do not know on what authority, as neither Prof. Steere nor Mr. Everett met with it.

SIPHIA LEMPRIERI, sp. n.

Adult male. General colour above dull blue, with half-concealed tufts of white on the sides of the rump; lesser wing-coverts brighter cobalt, forming a shoulder-patch; median and greater series blackish, externally like the back; bastard wing, primary-coverts, and quills black, with narrow margins of dull blue, broader on the secondaries; tail-feathers blackish, greenish blue externally; head like the back, the base of the forehead brighter cobalt, extending backwards over the eye and forming an eyebrow; lores black; sides of face and ear-coverts and cheeks black, glossed with dull blue; a moustachial line of blue feathers tipped with white; a black chin-spot; throat and fore neck orange-buff, extending down the sides of the body, but paler, and inclining to whitish below the black chin-spot; centre of breast and abdomen white, as also the under tail-coverts, with a slight tinge of buff; lateral breast-feathers tipped with blue, like the back; thighs white, with blackish bases; axillaries and under wing-coverts white, slightly tinged with buff; edge of wing blue. Total length 5·9 inches, culmen 0·7, wing 2·9, tail 2·5, tarsus 0·7.

This species is closely allied to *Siphia philippensis*, but is much larger, of a more greenish blue, and is especially distinguished by the white moustache, forming a narrow line down each side of the throat.

ZEOCEPHUS CYANESCENS, Sharpe.

Zeocephus cyanescens, Sharpe, *t. c.* p. 328, pl. 48. fig. 2; id. Cat. B. iv. p. 343.

A single specimen of what I believe to be the female of this species. It is like a huge *Hypothymis*, but I believe it to be really the other sex of *Z. cyanescens*.

General colour above dark vinaceous brown, rather clearer on the rump and upper tail-coverts; wing-coverts duller brown, the greater series externally edged with vinaceous brown; quills dark brown, externally margined with reddish brown, much paler and more tawny rufous along the outer webs of the secondaries; tail-feathers dull rufous, browner on the edges; head crested, dull cyaneous, more dusky in front of the eye; sides of face, cheeks, and under surface of body from the throat to the breast pale ashy cyaneous, dull whitish on the flanks and under tail-coverts, with a faint vinous tinge; sides of neck dull cyaneous, washed with brown; axillaries light fulvous; under wing-coverts dark brown, washed with dull blue; quills dusky brown below, ashy fulvous along the edge of the inner web. Total length 6·8 inches, culmen 0·8, wing 3·35, tail 3·35, tarsus 0·7.

Lord Tweeddale, in describing his *Trichostoma rufifrons* (P. Z. S. 1878, p. 616), suggests that *Z. cyanescens* may be congeneric with *T. rufifrons*. I have described and classified the Timeliidæ since that time, and find that *T. rufifrons* is a

Turdinus (Cat. B. vii. p. 546), while *Zeocephus* is a true Flycatcher, nearly allied to *Terpsiphone*.

IRENA TWEEDDALII, Sharpe.

Irena tweeddalii, Sharpe, *t. c.* p. 333; id. Cat. B. vi. p. 178; Wardlaw Ramsay, *t. c.* p. 657.

Several specimens of both sexes. Mr. Everett does not appear to have met with it.

ANUROPSIS CINEREICEPS (Tweedd.).

Anuropsis cinereiceps (Tweedd.); Sharpe, Cat. B. vii. p. 590.

Drymocataphus cinereiceps, Tweedd. *t. c.* p. 617; Wardlaw Ramsay, *t. c.* p. 657.

Two specimens in full plumage.

CINNYRIS AURORA (Tweedd.); Shelley, Monogr. Nect. pl. 47. fig. 1; Wardlaw Ramsay, *t. c.* p. 658.

Cyrtostomus aurora, Tweedd. *t. c.* p. 620.

Some specimens of this beautiful species are in the collection.

HIRUNDO JAVANICA, Sparrm.

Hirundo javanica, Sparrm.; Tweedd. *t. c.* p. 615; Wardlaw Ramsay, *t. c.* p. 657.

One specimen.

EULABES JAVANENSIS, Osb.

Eulabes javanensis, Osb.; Wardlaw Ramsay, *t. c.* p. 658.

Gracula javanensis, Tweedd. *t. c.* p. 622.

Procured also by Prof. Steere and Mr. Everett.

CALORNIS PANAYENSIS (Scop.).

Calornis panayensis (Scop.); Tweedd. *t. c.* p. 622; Wardlaw Ramsay, *t. c.* p. 658.

Found also by Mr. Everett and Prof. Steere.

PITTA SORDIDA (Müll.).

Brachyurus sordidus, Sharpe, *t. c.* p. 331.

Melanopitta sordida, Tweedd. *t. c.* p. 919; Wardlaw Ramsay, *t. c.* p. 657.

One specimen sent.

CARPOPHAGA ÆNEA, Tick.

Carpophaga ænea, Tick.; Tweedd. *t. c.* p. 623; Wardlaw Ramsay, *t. c.* p. 659.

Observed by Mr. Everett at Puerto Princesa.

PTILOPUS MELANOCEPHALUS (Forst.).

Ptilopus melanocephalus (Forst.); Tweedd. *t. c.* p. 951; Wardlaw Ramsay, *t. c.* p. 659.

New to Palawan, but known from South Mindanao, Basilan, and the Sulu Islands.

MEGAPODIUS CUMINGI, Dillw.

Megapodius cumingi, Dillw.; Tweedd. *t. c.* p. 624.

Two specimens. See Lord Tweeddale's remarks, *l. c.*

ÆGIALITIS PERONI (Temm.).

Ægialitis peronii (Temm.); Tweedd. *t. c.* p. 344; Wardlaw Ramsay, *t. c.* p. 659.

This species was found by Mr. Everett in Leyte and Bohol. Is this the *Ægialitis cantianus* of Lord Tweeddale (P. Z. S. 1878, p. 624)?

ÆGIALITIS GEOFFROYI, Wagl.

Eudromias geoffroyi, Tweedd. *t. c.* pp. 344, 624.

Found by Mr. Everett at Puerta Princesa.

XXXV.—*Remarks on the Eighth and Ninth Volumes of the 'Catalogue of the Birds in the British Museum.'* By T. SALVADORI, C.M.Z.S, For. Memb. B.O.U.

THE eighth and ninth volumes of the 'Catalogue of the Birds in the British Museum' have been prepared by Mr. Gadow. It is not my intention to write a complete critical review of them, but only to proffer some remarks especially on those points in which I am concerned, or which are well known to me, as relating mostly to Papuan species.

The eighth volume contains the Paridæ, Laniidæ, and Certhiomorphæ.

In the Introduction (p. viii) Mr. Gadow mentions the names of eight "gentlemen, who by the loan of specimens have considerably facilitated the completion of the volume." Certainly it would have been too great an honour for me to have had my name united with theirs; but still I do not understand why Mr. Gadow should have omitted it entirely, as, besides the type of *Lanius antinorii,* I sent for inspection to the British Museum a *complete set* of all the Pachycephaline birds belonging to Beccari's and D'Albertis's Papuan collections, every specimen being properly named. Several of them were *type* specimens, and I suppose that Mr. Gadow must have derived some benefit from their examination.

Coming now to some particular points, we find that *Malaconotus hypopyrrhus,* Hartl., has been united with *Laniarius poliocephalus* (p. 156). I know that several ornithologists agree in this; but according to my idea the two birds are distinct. Heuglin has already remarked (Orn. N.O.-Afr. p. 466) that among many specimens collected by him in North-east Africa none had the orange tint on the breast, which is peculiar to *L. hypopyrrhus.* I may add that Antinori's first African collection (Cat. p. 54) contained five specimens from Djur, three males and two females, and none had the orange breast like the two specimens which he has lately sent from Shoa. Leaving that question, and admitting for a moment that *L. hypopyrrhus* (Hartl.) is = *L. poliocephalus,* it seems very curious to find that while *L. hypopyrrhus* was described in 1844, Mr. Gadow should use now (p. 155) the same name for another species, viz. *Vanga cruenta,* Less. (nec *Lanius cruentus,* H. et E.)! I therefore propose for Lesson's species the name of LANIARIUS LESSONI.

I have been much astonished at the curious mixture of *Pachycephala macrorhyncha,* Strickl., and *P. obiensis,* Salvad., with *P. melanura,* Gould, in Mr. Gadow's volume (p. 185). I believe that Mr. Sharpe, in his Report of the 'Alert,' is about to settle those birds in their proper places again. Mr. Gadow, notwithstanding Canon Tristram's remarks and my acquiescence with them, unites *P. christophori,* Tristr., with *P. astrolabi*!*

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* In the course of some remarks made before the Zoological Society of London, Canon Tristram has, I believe, already objected to this and other identifications made by Mr. Gadow.

The insular forms *P. jobiensis* and *P. miosnomensis* are united with *P. griseiceps* (p. 215), although sufficiently distinct. I must also protest against calling the *Muscitrea cyanea,* Hume (p. 224), *P. cyanea,* there being already a *Pachycephala cyanea* of mine, especially as Mr. Gadow could have chosen for Mr. Hume's species one of the two other names belonging to it. I do not see much use in having a figure (pl. ix.) of *Pachycephala poliosoma,* as this species has already been figured in the 'Birds of New Guinea,' pt. xiii. Mr. Gadow could have bestowed one of his plates on a species not yet figured.

In concluding my remarks on Mr. Gadow's eighth volume of the Catalogue, I may say that I have failed to find in it any mention of the following species :—

1st. *Lanius dorsalis,* Cab. Journ. f. Orn. 1878, pp. 205, 225, which most likely is the same as my *Lanius antinorii,* and which has already been mentioned several times (Ibis, 1879, pp. 104, 354; Journ. f. Orn. 1879, p. 213; Oust. Note s. l. Ois. Comalis, p. 10, 1882).

2nd. *Lanius gubernator,* Hartl. Orn. Centralbl. 1882, p. 91; id. Journ. f. Orn. 1882, pp. 323, 350, Taf. i. f. 2.

3rd. *Lanius pyrrhostictus,* Holub et Pelz. Beitr. Orn. Sudafr. p. 97, Taf. ii. (1882); Pelz. Verh. zool.-bot. Gesellsch. Wien, 1882, p. 505; Hartl. Abh. naturw. Ver. Brem. 1882, p. 224.

The last is, most likely, only the female of *Lanius collaris.*

These omissions (and perhaps there may be others which now escape me) show clearly that Mr. Gadow is not very well acquainted with ornithological literature.

The second volume by Mr. Gadow contains the Nectariniidæ and the Meliphagidæ; but I am sorry to say that in treating of the former he has only succeeded in spoiling the good work done by Capt. Shelley in his excellent Monograph of that family, and that as regards the Meliphagidæ, Mr. Gadow has done as much as he could to reduce them to a very sad state of confusion, having destroyed the little order I tried to introduce among them while treating in my

'Ornitologia' of more than a hundred species—that is to say, nearly half the known ones.

As regards the Nectariniidæ, Mr. Gadow recognizes only as races *Nectarinia bocagei, N. cupreonitens, Æthopyga cara, Æ. nicobarica,* and *Æ. horsfieldi*; and perhaps he may have some apparent reason, although to my mind several of these are entitled to specific rank as much as many others recognized as distinct by Mr. Gadow. According to my idea the genus *Eudrepanis,* if not *Urodrepanis,* ought to be kept separate from *Æthopyga.* Under *Cinnyris venusta* Mr. Gadow unites four races, which Capt. Shelley separates as species. *C. osiris, C. erythroceria, C. bifasciata,* and *C. microrhyncha* are united with *C. mariquensis*; *C. andamanica* with *C. flammaxillaris*; *C. frenata* with *C. jugularis*; *C. acik* with *C. senegalensis*; *C. kirki* with *C. amethystina*; *Anthothreptes hypodila* and *A. zambesiana* with *A. collaris*; and *A. celebensis, A. rhodolæma,* and *A. chlorogaster* with *A. malaccensis!*

But Mr. Gadow has made still greater havoc in the *Hermotimia* group. While twelve species (leaving out *H. grayi*) and three subspecies have been admitted by Captain Shelley, who ought to know something about them, Mr. Gadow has reduced them to three only! Even allowing that *H. morotensis* may not be sufficiently distinct from *H. auriceps, H. salvadorii* from *H. nigriscapularis,* and *H. aspasioides, cornelia, corinna, mysorensis, jobiensis,* and even *maforensis* from *H. aspasia,* I should like to ask anybody who knows anything about birds if *H. auriceps* and *H. porphyrolæma,* with the metallic portion of the plumage (except the head) of a very dark steel-blue, can be united with *H. aspasia, H. nigriscapularis,* and *H. proserpina,* which have the metallic portion of the plumage golden green on the upper tail-coverts and rump, while the last two species are so conspicuously different from *H. aspasia,* wanting the bright golden-green scapulars, and differ *inter se* as regards the smaller wing-coverts, which are entirely bright bluish green in *H. proserpina,* and black, except a few on the angle of the wing, in *H. nigriscapularis.*

The importance of all these differences is confirmed by the different geographical distribution of each form, and would be duly appreciated by any one who is accustomed to discriminate allied forms. But for that one must be an ornithologist. Moreover, while our author has tried to keep as different races *H. aspasia* and *H. aspasioides*, he has made a great confusion as regards their geographical distribution. The range of *H. aspasioides* is given (p. 71) as "S.E. New Guinea and New Britain," whereas it was described from *Amboyna*, and it is confined to the Amboyna or Ceram group; and among the localities of *H. aspasia* Mr. Gadow includes Amboyna, where that form has never been found. In fact *H. aspasioides* is, in the Ceram group, the Moluccan representative of the exclusively Papuan *H. aspasia*.

I must also point out that Mr. Gadow has entirely omitted *Cyrtostomus melanocephalus* (Ramsay) from the Solomon Islands, described at p. 269 of the second volume of my 'Ornitologia della Papuasia e delle Molucche,' where, besides the description, all the quotations belonging to it are to be found. This species has been omitted by Capt. Shelley in his Monograph, and so has escaped the notice of Mr. Gadow, who has not even taken the trouble of looking into that part of my work relating to the Nectariniidæ, *which he has most carefully avoided quoting*.

Passing to the Meliphagidæ, the first species we find (p. 129) is *Myzomela guentheri* from New Britain, described as new, while most certainly it is the same as my *Myzomela erythromelas*, of which there is no mention in Mr. Gadow's volume, although it was described by me in 1881 (Atti R. Ac. Sc. Tor. xvi. p. 624), mentioned in the 'Annali del Museo Civico di Genova,' xviii. p. 424, and in 'The Ibis,' 1882, p. 176, and redescribed in the third part of my 'Ornitologia,' p. 541. *M. infuscata*, Salvad., a representative form of *M. erythrocephala* in the Aru Islands, has also escaped Mr. Gadow's attention. *Myzomela adolphinæ* is regarded as a representative form of *M. erythrocephala* (p. 134), while it belongs to a different group, being much more allied to *M. boiei* and *M. chloroptera*. With *M. cruentata*, Meyer, from the Arfak Mountains, are united *M. coccinea*, Ramsay, from Duke of

York Islands, and *M. erythrina,* Ramsay, from New Ireland; but I have examined a specimen of the last, and it is certainly distinct, as is most likely *M. coccinea.* *M. rubrobrunnea,* Meyer, and *M. rubrotincta,* Salvad., are perfectly distinct from *M. simplex,* of which Mr. Gadow considers that they are only subspecies.

It is a blessing that in the Catalogue the genus *Zosterops* has been treated of by Mr. Sharpe, as otherwise who knows into what a state of confusion it would have been reduced!

In the genus *Glycyphila* Mr. Gadow includes the genera *Glycychæra* and *Stigmatops,* to which I cannot assent, and also unites *Stigmatops chloris* and *S. subocularis* with *Glycyphila ocularis.* I can find no mention of my *Stigmatops blasii* from Amboyna, described in the third part of my 'Ornitologia,' p. 543. Most likely this is the bird from Ceram mentioned quite recently by Dr. A. B. Meyer ('Ueber neue und ungenügend bekannte Vögel, Nester und Eier aus dem ostindischen Archipel,' p. 40) as *Myzomela,* n. sp.

Treating of the genus *Ptilotis,* there are many points where the opinions expressed by Mr. Gadow are at variance with the facts established by me. He divides *P. analoga* into three races, one of which, *P. flavirictus,* I still regard as specifically distinct; the so-called southern race, with the yellow auricular feathers very short, is to be found also in the north.

With *P. albinotata,* Salvad., Mr. Gadow (p. 229) unites *P. montana,* Salvad.; but I doubt whether he has ever seen any specimen of the two, and I shall continue to believe that they are really distinct, the former living in the low districts, and *P. montana* in the mountains.

In the genus *Ptilotis* Mr. Gadow has included a most natural group, which has been separated as *Xanthotis*; the type of this group is *P. chrysotis* (Less.). I have seen many specimens of this bird, also from Dorey and Andai, and none had the feathers of the hind neck tipped with grey. I suspect that the specimen from Waigiou, which is described (p. 238) as most richly coloured, belongs to my *Xanthotis fusciventris,* regarded as a subspecies by Mr. Gadow, who has wrongly translated my description of it. I said, "*corpore subtus minime rufescente . . . . abdomine griseo-fusco.*" *Minime* means "*not at all,*" while Mr. Gadow has translated it "*less*;" and *griseo-fusco* does not mean that the abdomen is *mottled*, but simply *brownish grey*.

Passing to the genus *Philemon*, *Ph. jobiensis* is not simply a subspecies, but a most distinct insular form, and, besides having the fore part of the crown bare, it wants completely the knob at the base of the culmen. I said, "*culmine rostri . . . . minime tuberoso*;" and again *minime* means "*not at all.*"

In the habitat of *Ph. moluccensis* (p. 276) I find Bouru and the Ké Islands, and two specimens from the latter locality are attributed to that species. But here there must be some mistake, as *Ph. moluccensis* only lives in Bouru, and in the Ké Islands only *Ph. plumigenis* is to be found. To this species are attributed (p. 280) the specimens from Tenimber Islands; but I am inclined to agree with Dr. Meyer, who quite recently has separated them as *Ph. timorlaoënsis* (*l. c.* p. 41). In the genus *Philemon* is included *Ph. sclateri*, which I still believe to be allied to the genera *Melidectes* and *Melirrhophetes*, and to be generically separable as *Meliarchus*.

The union of *Melipotes gymnops* in one genus with the species attributed to *Euthyrhynchus* is beyond my comprehension!

The last species included in Mr. Gadow's vol. ix. of the British Museum Catalogue is my *Œdistoma pygmæum*, relegated to the Appendix. The author's last remark is as follows:—"Count Salvadori has placed this genus between his genera *Glycychæra* and *Melilestes*. Not having seen a specimen, I have not been able to place it systematically, but it probably comes near *Glycyphila*." I can most positively state that Mr. Gadow would not have erred if he had left in peace my genus *Melilestes*, instead of splitting it into two parts, one of which, most wrongly, he has attributed to *Arachnothera*! *Melilestes novæ-guineæ*, *M. iliolophus*, *M. affinis*, and *M. poliopterus* are no *Arachnotheræ* at all, but most certainly Meliphagine birds; they have the "bill with a prominent culmen, broadened out at base . . . maxilla serrated.

Nostrils basal, situated in a large unossified groove, which is quite soft and membranous, *longitudinal,* and with a well-developed coriaceous operculum" (Gadow, *l. c.* p. 127). *Ex ore tuo te judico.* The species of the genus *Glycychæra* (abolished by Mr. Gadow), and those of *Œdistoma* and *Melilestes* (also abolished), constitute a very natural group of the Meliphagidæ, and must be accepted as proposed in my work.

Among the nine plates illustrating this volume we find one (pl. iv.) of *Ptilotis marmorata,* already figured in the 'Birds of New Guinea,' so that the figure of one not yet represented would have been more useful.

After having seen Mr. Gadow's volumes, I have come to the conclusion that the authorities of the British Museum were not well advised in entrusting him with that ornithological task. A work like the 'Catalogue of the British Museum' should be done by an experienced ornithologist, and not by an occasional one, like Mr. Gadow. I know that those authorities have been influenced by the wish expressed from different sides of having the great work accomplished in a shorter time; but the good or the best possible execution of the work should not be sacrificed to that desire. No human work is perfect, and I know that but too well, having failed more than once; but in any case the work should be assigned to a competent person. No doubt in the volumes of the Catalogue prepared by Mr. Sharpe there are also mistakes; but still one sees that they have been done by a competent person and a thorough ornithologist.

I shall conclude by expressing my opinion that it would have been much better if the volumes of the Catalogue not prepared by Mr. Sharpe had been published with his revision and under his responsibility, and I hope that this will be done in future. In this way we may expect to have, besides other advantages, the necessary uniformity in that great undertaking, the 'Catalogue of the Birds.'

XXXVI.—*Contributions to the Ornithology of the Philippine Islands.—On two Collections of Birds from the vicinity of Manilla.* By R. G. Wardlaw Ramsay, F.Z.S., M.B.O.U., &c.

(Plate IX.)

In the course of the last four months I have received through the kindness of my friend Mr. Frederick Maitland-Heriot, of Manilla, two collections of bird-skins which were made in the neighbourhood of that town.

The skins in the first collection were in a very ragged condition, and in many cases barely recognizable; but those in the second collection were prepared by a skilful taxidermist, by name Pio Oliva.

In the first collection five species only require notice:—

1. Hypotriorchis severus (Horsf.) (13)[*].

Hypotriorchis severus (Horsf.), Wald. T. Z. S. ix. p. 139 (p. 306); Tweedd. P. Z. S. 1878, p. 937 (p. 629), Zamboanga.

One example in adult plumage.

2. Accipiter manillensis (18 partim).

Accipiter stevensoni, Gurney apud Tweedd. P. Z. S. 1878, p. 938, pl. lvii. (p. 629).

Accipiter manillensis, Meyen, Beitr. p. 69, pl. 9.

Mr. Gurney thus identifies a specimen sent from Manilla by Mr. Maitland-Heriot in his 'List of the Diurnal Birds of Prey in the Norwich Museum.' As Mr. Gurney has (App. O. pp. 173–177) treated of this species at considerable length, I refer the readers of 'The Ibis' to his remarks there given.

3. Circus melanoleucus (27).

Circus melanoleucus (Forst.), Wald. T. Z. S. ix. p. 143 (p. 311).

Three specimens, ♂, ♂ juv., ♀.

The occurrence of this Harrier in the Philippine Islands is thus fully established.

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[*] The numbers in brackets following the title are those of my revised list of Philippine Birds, App. Tweedd. Orn. Mem., and those following the references to Lord Tweeddale's writings indicate the page on which they will be found in the Memoirs.

4. PYRRHOCENTOR UNIRUFUS.

Pyrrhocentor unirufus, Cab. Mus. Hein. iv. p. 118.

Pyrrhocentor melanops (Less.), Wald. T. Z. S. viii. p. 56 (p. 158); id. ibid. ix. p. 164 (p. 330).

I am inclined to think that this is a distinct species, and not the young of *P. melanops*, as Lord Walden supposed (*l. c.*).

In measurements it certainly agrees with that species, but the single specimen sent appears to have had an apple-green bill when freshly killed, like a *Rhopodytes*.

5. EXCALFACTORIA CHINENSIS (Linn.).

Excalfactoria chinensis (L.), Wald. T. Z. S. ix. p. 224 (p. 387).

The single specimen sent is so badly skinned that it is impossible to be quite sure to what species it belongs; but it appears to agree with specimens from Burmah, Sumatra, Malacca, and Borneo.

The second collection contained 200 specimens referable to 75 species, of which 23 do not appear in the list of Luzon birds collected by Mr. A. H. Everett (P. Z. S. 1877, pp. 686–703).

Three species have to be added to my "Revised List of Philippine Birds," Tweedd. Orn. Mem. App. pp. 655–660, viz.:—

13 *a*. FALCO MELANOGENYS.

88 *a*. HIEROCOCCYX FUGAX (?=88. *H. pectoralis*).

212 *a*. MELANIPARUS SEMILARVATUS.

I may take this opportunity of mentioning that, in the list above referred to, one species was accidentally omitted, viz. *Cinnyris flagrans*, Oustalet, from Manilla. Of this species, apparently, only the type specimen (in the Museum of the Jardin des Plantes in Paris) is known; but, having sent a copy of Capt. Shelley's figure (Mon. Cinn. pl. 47) to Mr. Maitland-Heriot, I hope to obtain additional examples.

According to Mr. J. H. Gurney, No. 18, *Accipiter stevensoni*, should be expunged, and *Accipiter nisoides*, Blyth, and

A. manillensis (Meyen) entered—there being in the Tweeddale collection a female of the former from Zamboanga and two presumably young birds of this species from the same place, and the specimen of the latter above referred to from Manilla.

The species to be noticed in the second collection are:—

1. Falco melanogenys, Gould.

Mr. Gurney thus identifies a female specimen sent by Mr. Maitland-Heriot, and informs me that the specimen in the Norwich Museum, said to come from the Philippine Islands, which is alluded to by the late Lord Tweeddale, T. Z. S. ix. p. 139 (p. 306), is exactly similar.

The occurrence of this Falcon in the Philippines is thus established.

2. Ceyx melanura.

Alcedo melanura, Kaup, Fam. der Eisv. p. 15.

Ceyx melanura (Kaup), Sharpe, Mon. Alced. pl. 39; Wald. T. Z. S. ix. p. 153 (p. 320).

One specimen.

3. Ceyx cyanopectus. (Plate IX.)

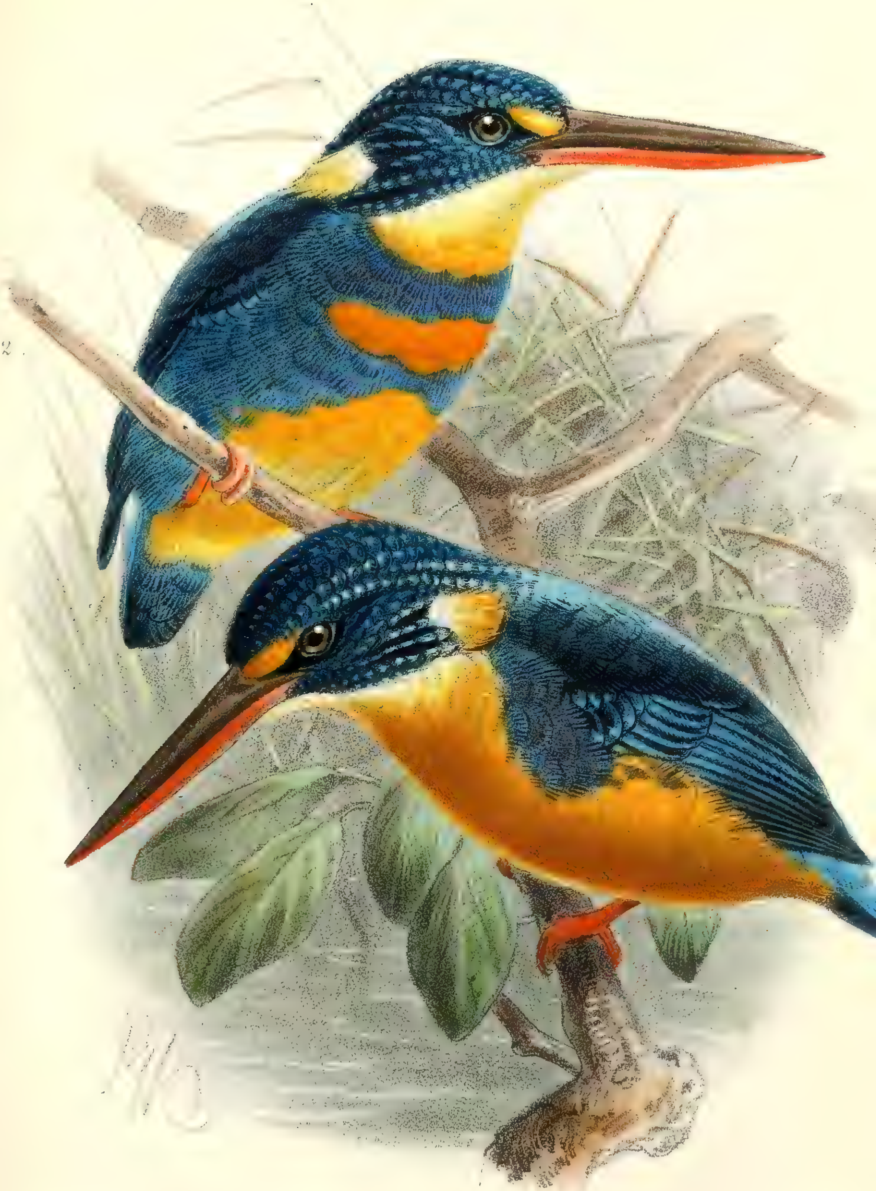
Ceyx cyanopectus, La Fresnaye, Rev. Zool. 1840, p. 33 (♀?).

Ceyx philippinensis, Gould, P. Z. S. 1868, p. 404 (♂?).

Alcyone cyanopectus (La Fr.), Sharpe, Mon. Alced. pl. 17.

Ceyx philippinensis, Gld., Sharpe, Mon. Alced. pl. 37; Wald. T. Z. S. ix. p. 153 (pp. 319–320).

On seeing the four specimens sent, two specimens being in the plumage of *A. cyanopectus* and two in that of *C. philippinensis,* it at once occurred to me that the two plumages were those of the two sexes of the same species. I forwarded them to Mr. R. Bowdler Sharpe, who replied:—"The Kingfishers are very interesting, and are *Alcyone cyanopectus* and *Ceyx philippinensis* of my monograph. When I wrote I had seen only one specimen of *Ceyx philippinensis,* and was inclined to consider the two species distinct; but I greatly doubt it now, and suspect that the two are sexes of one and the same species."



J G Keulemans lith

Hanhart imp

CEYX CYANOPECTUS. 1,♂ 2,♀

Now if Mr. Sharpe's figure (*l. c.*) accurately represents the specimen from which it professes to be taken, there is a wide difference in plumage between it and the two specimens which Mr. Sharpe now identifies with *A. cyanopectus.* These specimens are generally similar in plumage to the two examples of *C. philippinensis* sent by Mr. Maitland-Heriot, which in turn agree with Mr. Sharpe's plate, except that that plate appears to have been taken from a much faded specimen. They, however, differ in having the patches of blue meeting across the breast, thus forming a broad pectoral band, within which is a narrower transverse patch, stretching nearly across the breast, of the same deep bright rufous as the rest of the lower surface. The flanks also are deep lazuli blue and not rufous, as in *C. philippinensis*, Gld. The birds in this plumage I take to be females; but as the sexes have not been determined by the collector, I am unable to speak with certainty.

4. HIEROCOCCYX FUGAX.

Cuculus fugax, Horsf. T. L. S. xiii. p. 178.

An immature specimen agreeing closely with Malaccan specimens. It may be that it is a young bird of *H. pectoralis*, Cab., which would rather be evidence in favour of the identity of the two species. I have never seen a specimen of true *H. fugax* with the uniform rufous breast of *H. pectoralis*, Cab.

Count Salvadori unites *H. pectoralis* as well as *H. hyperythrus*, Gld., to *H. fugax* (Ucc. Born. p. 63), and Professor Schlegel (Mus. P.-Bas, Cuculi, p. 14) goes further and unites *H. pectoralis* and *H. fugax* to *H. varius* (Vahl). I should have least hesitation in agreeing with the latter author in this instance. It is difficult to imagine how any of the birds known under the various titles mentioned could ever attain to the very marked plumage of the specimen of *H. hyperythrus* in the British Museum.

As I have requested Mr. Maitland-Heriot to send me all the Cuckoos he can obtain, I hope soon to be in a position to settle this question.

5. LALAGE MELANOLEUCA.

Pseudolalage melanoleuca, Bl., Wald. T. Z. S. ix. p. 178 (p. 343), pl. xxix. f. 2.

The plumage of the female has not yet been described; it is as follows:—As in the male, but the glossy greenish black of the head, mantle, and scapulars replaced by ashy grey, and the white of the lower surface thickly barred with grey. Dimensions rather less.

Appears to be not uncommon near Manilla.

Two female specimens were collected by Mr. A. H. Everett at Laguna de Bai, near Manilla; but Lord Tweeddale omitted to mention them in his paper on Luzon birds, P. Z. S. 1877.

6. PERICROCOTUS CINEREUS.

Pericrocotus cinereus, La Fresn., Wald. T. Z. S. ix. p. 179 (p. 345).

Three specimens.

7. ZEOCEPHUS RUFUS.

Zeocephus rufus, G. R. Gr., Wald. T. Z. S. ix. p. 183 (p. 348).

Three specimens. A specimen presented to me by Herr Kutter, of Neustadt, which was collected by Herr Koch in S. Mindanao (*vide* J. f. O. 1883, p. 309), agrees with the above specimens.

8. PITTA ERYTHROGASTRA.

Pitta erythrogastra, Temm., Wald. T. Z. S. ix. p. 187 (p. 352).

One specimen, which agrees with birds collected by Mr. A. H. Everett at Zamboanga in S.W. Mindanao, *vide* P. Z. S. 1878, p. 948 (p. 639).

9. MELANIPARUS SEMILARVATUS.

Melaniparus semilarvatus, Salvad. Atti Soc. Ital. Sc. Nat. viii. p. 375 (1865); id. J. f. O. 1868, p. 68; id. Ibis, 1879, p. 300, pl. ix.

Parus semilarvatus (Salvad.), Gadow, Cat. B. viii. p. 38.

The rediscovery of this bird, which has been for so long shrouded in mystery, is most interesting. One of the two specimens in the British Museum is labelled Philippine

Islands; but the other is marked N. China, and the two typical specimens at Turin are said to have been received with many other Himalayan birds from Baron Solaroli; but Count Salvadori has stated (Ibis, 1879, p. 300) that he suspects that in reality these birds had been given to the Turin Museum by Baron Rollet along with some Central-African birds. All the other species of *Melaniparus* are African.

Two specimens are sent by Mr. Maitland-Heriot.

10. NUMENIUS PHÆOPUS.

Numenius phæopus (L.), Wald. T. Z. S. ix. p. 232 (p. 395).

The Philippine Whimbrel is referred by Salvadori (Orn. Pap. iii. p. 332) to *N. variegatus*, Scop.

One specimen.

11. ARDETTA FLAVICOLLIS.

Ardetta flavicollis (Lath.), Wald. T. Z. S. ix. p. 236 (p. 398); Tweedd. P. Z. S. 1877, p. 834 (p. 560).

One specimen.

12. GORSACHIUS MELANOLOPHUS.

Ardea melanolopha, Raffles, T. L. S. xiii. p. 326.

Gorsachius goisagi, Temm. Pl. Col. 582; Faun. Jap. p. 116, pl. 70.

Gorsachius melanolophus (Raffl.), Wald. T. Z. S. ix. p. 238 (p. 401).

Butio kutteri, Cab. J. f. O. 1881, p. 425.

The single specimen sent, which is in immature plumage, agrees in the length and shape of its bill with an adult specimen from Japan, and differs from all my other specimens from Ceylon, the Nicobar Islands, Malacca, and (?) Pegu in this respect. Furthermore it differs from all other immature specimens in having no white subterminal spots to the crest-feathers. This specimen is in the plumage of the figure of the immature bird in the 'Fauna Japonica.' I am disposed to think that the Japanese and Philippine birds must be kept distinct under the title of *G. goisagi*; but see the writings of Mr. Oates (B. Burmah, ii. p. 261) and Mr. A. O. Hume (S. F. ii. p. 312, and viii. p. 114).

XXXVII.—*Notices of recent Ornithological Publications.*

(Continued from p. 214.)

41. *Bennett on the Habits of* Leipoa.

[On the Habits of the Mallee Hen, *Leipoa ocellata.* By K. H. Bennett, Esq. Proc. Linn. Soc. N. S. W. viii. p. 193.]

Mr. Bennett gives some interesting notes on the nesting-habits of this "mound-builder," as observed in the Mallee Scrubs of New South Wales. One of the mounds measured was 37 feet in circumference, and the writer had seen some much larger.

42. *Blakiston's amended List of the Birds of Japan.*

[Amended List of the Birds of Japan, according to Geographical Distribution; with notes concerning Additions and Corrections since January 1882. By T. W. Blakiston. (Printed for private circulation.) 8vo. London: 1884.]

For the use of his brother ornithologists in Japan, Capt. Blakiston has prepared an amended list of the birds of that country, to which are added notes on the corrections and additions made since the issue of the previous edition of the catalogue (*cf.* Ibis, 1882, p. 599).

The number of species now recognized as Japanese is about 350. These are divided into the following categories:—

A. Species common to Yezo and the main islands of Japan	217
B. Migrants hitherto only obtained in Yezo or the Kuriles, but probably also to be met with in the main islands	43
C. Species not found in Yezo or the Kuriles	75
D. Non-migrants, but found South of Yezo	8
E. Species only found in the Kuriles	8
	351

In his preface Capt. Blakiston gives the following list of five species found in Yezo which have distinct representatives in the main islands:—

Yezo Species.	*Representatives in Main Islands of Japan.*
Picus minor.	Picus kisuki.
Dryocopus martius.	Dryocopus richardsi.
Gecinus canus.	Gecinus awokera.
Garrulus brandti.	Garrulus japonicus.
Acredula caudata.	Acredula trivirgata.

It will thus be evident that, in accordance with what Capt. Blakiston has shown in a previous memoir (*cf.* 'Ibis,' 1883, p. 562), Yezo belongs to the fauna of Siberia, and has species more akin to those of Northern Europe, while the main islands of Japan appertain rather to the same area of distribution as the adjacent portion of China. Such forms as *Tchitrea princeps*, *Pericrocotus cinereus*, and *Megalurus pryeri* are manifestly southern elements in the Japanese avifauna, and are never found in Yezo.

43. *Blasius's Ornithological Contributions.*

[Ornithologische Mittheilungen. Von R. Blasius. Sitzungsb. d. Verein f. Naturwiss. zu Braunschweig, Dec. 3, 1883.]

Dr. R. Blasius's notes refer to *Serinus hortulanus*, *Ciconia nigra*, and *Picus major*.

44. *Cooke and Widmann on Bird-migration in the Mississippi Valley.*

[Bird-Migration in the Mississippi Valley. By W. W. Cooke and Otto Widmann. Read before the Ridgway Ornithological Club, Chicago, Illinois, U. S. A., 1883.]

This paper, reprinted from the 'American Field,' contains an account of the field-notes on the arrivals and departures of the migrant species made by Mr. Widmann at St. Louis, on the Mississippi, and by Mr. Cooke at Jefferson, Wis., during the spring of 1883. The combined notes on each species are added afterwards in systematic order.

45. *Cory on the Birds of San Domingo.*

[The Birds of Haiti and San Domingo. By Charles B. Cory, F.L.S. Estes and Lauriat, Boston, 1884. Part I., 5 pp., 6 plates, quarto.]

We have received with great pleasure the first number of

Mr. Cory's new work on the birds of San Domingo. To the exploration of this interesting but much neglected island Mr. Cory has, as we all know, devoted his attention for several years, and now gives us the results of his investigations. The present number contains his account of the Oscinine Passeres down to the commencement of the Tanagridæ, namely, 2 Turdidæ, 15 Sylvicolidæ, 1 Cœrebidæ, 2 Hirundinidæ, 1 Vireonidæ, 2 Ampelidæ, and 2 Tanagers. Of these species nine or ten are forms peculiar to the island, the rest are mainly North-American visitors in the winter. The number of generic forms restricted to San Domingo is, as is well known, remarkable. We already have in that island *Ligia, Dulus,* and *Phœnicophilus,* and there are several others to follow.

The species figured in the present number are *Mimocichla ardesiaca,* with its nest and eggs, *Ligia palustris, Hirundo sclateri, Myiadestes montanus,* and *Spindalis unicolor.*

Mr. Cory will forgive us for reminding him that in these days every local fauna should have a map attached to it, with the special localities given in the text plainly marked. Such an addition greatly enhances its scientific value, not to mention its convenience.

46. *Crawford's 'Across the Pampas.'*

[Across the Pampas and the Andes. By Robert Crawford. London: Longmans, 1884.]

This is a book of travels, containing an interesting account of Mr. Crawford's adventures while surveying a route for the proposed Transandine Railway from Buenos Ayres to the Pacific. It contains many allusions to birds, particularly to those that served to vary the diet of the travellers. The "Blackbird" of Mendoza (p. 198) is, of course, *Turdus fuscater,* d'Orb. et Lafr., and the following passage, no doubt, relates to the singular Andean Duck, *Merganetta armata*:—

"Our route lay through the lovely valley of the Teno. In its rushing waters we saw in several places birds with the most wonderful power of swimming I had ever observed in any class of divers. From time to time they darted from the rocks into the boiling current, and issued from it on the opposite side of the stream with as much apparent ease as if their course had been through a pool of stagnant water. The facility with which, upon emerging from the river, they scrambled up the smooth-worn surface of the rounded stones was also marvellous. The natives told us they accomplished this by the aid of hooks with which their wings are provided, somewhat similar, I suppose, to the spurs on the wings of the Horned Plover and the Crested Screamer."

47. *Crowley's 'Catalogue of Birds' Eggs.'*

[Catalogue of Birds' Eggs in the Collection of Philip Crowley. (Privately printed.) Oct. 1883.]

Mr. Crowley's catalogue contains merely the names of the species arranged according to Gray's 'Hand-list.' His series is of considerable extent and includes, we believe, Canon Tristram's collection.

48. *Fischer and Reichenow on new Birds from Masai-land.*

[Neue Vogelarten aus dem Massailand (Inneres Ostafrika) entdeckt von Dr. G. A. Fischer während der im Auftrage der Geographischen Gesellschaft in Hamburg unternommenen Reise in das Innere der äquatorialen Ostafrikas, beschrieben von Dr. G. A. Fischer und Dr. Ant. Reichenow. Journ. f. Orn., Jan. 1884.]

This paper, an advance-copy of which has been kindly lent to us by Mr. Sharpe, contains short descriptions of the novelties obtained by Dr. Fischer during his recently accomplished excursion round the skirts of Kilima-ndjaro into the Masai country, to which we have already alluded (Ibis, 1883, p. 583, and 1884, p. 124). Twenty species are characterized as new, namely, *Corythaix hartlaubi* (a remarkable species, with the style of colour of *Gallirex porphyreolophus*), *Cotile rufigula*, *Dioptornis* (gen. nov. ex fam. Muscicapidarum) *fischeri*, *Alseonax murina*, *Chloropeta massaica*, *Notauges fischeri*, *Euplectes friederichseni*, *Nigrita cabanisi*, *Passer rufocinctus*, *Coraphites leucopareia*, *Megalophonus massaicus*, *Zosterops eurycricotus*, *Drepanorhynchus reichenowii* (gen. et sp. nov. ex fam. Nectariniidarum), *Cinnyris falkensteini, Parus fringillinus, Burnesia melanocephala, Calamonastes fischeri, Saxicola schalowi, Tarsiger orientalis,* and *Pseudocossyphus rufus* (gen. et sp. nov. ex subfam. Turdinarum).

49. *Gadow on the* Cinnyrimorphæ.

[Catalogue of the Birds in the British Museum. Volume IX. Cinnyrimorphæ: containing the Families Nectariniidæ and Meliphagidæ (Sunbirds and Honey-eaters). By Hans Gadow, M.A., Ph.D. London: 1884.]

The ninth volume of the 'Catalogue of the Birds in the British Museum' is devoted to the two great Old-World families Nectariniidæ and Meliphagidæ, wherein are comprehended 355 species. Of these 291 are represented in the national collection by 2450 specimens. As in the case of the eighth volume, the author is Dr. Hans Gadow, now Strickland Curator in the University of Cambridge.

As regards the Nectariniidæ, Dr. Gadow's task has not been a difficult one, Capt. Shelley's excellent illustrated monograph of this beautiful group having been only recently finished. We think, in fact, that Dr. Gadow would have done better if he had followed Captain Shelley's lead even more closely than he has done. His alterations of the last-named author's well-considered work are, in some cases, by no means emendations. Besides, where it comes to be little more than a matter of individual opinion, it is inconvenient to others to diverge unnecessarily from the arrangement adopted by the standard authority on the subject.

In placing the *Zosteropes* among the Meliphagidæ, Dr. Gadow, we suppose, acts merely in obedience to higher authority. He says, truly enough, that "their degree of relationship to the Honey-eaters is doubtful." But, omitting the *Zosteropes*, which have been treated by Mr. Sharpe, it cannot be said that Dr. Gadow has been successful in the general grouping of this family, as any one who refers to the so-called key (p. 127) must admit. The two genera *Melithreptus* and *Plectorhynchus* are obviously Meliphagine, and it passes our comprehension to understand upon what grounds they are referred to the Zosteropinæ. Nor can we approve of the insertion of *Promerops* among the Meliphaginæ.

The new species in the present volume appear to be *Myzomela guentheri*, from New Britain, described by Dr. Gadow; and *Zosterops crissalis* (New Guinea), *Z. gallio* (Java), and *Z. fallax* (Java and Sumatra), by Mr. Sharpe. The two last-named had been previously described under unusable names. The species figured are *Arachnothera polioptera, A. iliolophus, Philemon cockerelli, Myzomela guentheri, Ptilotis marmorata, P. megalorhynchus, P. polygramma, P. virescens,* and *P. limbata.*

50. *Goss on the Birds of Kansas.*

[A Catalogue of the Birds of Kansas. By N. S. Goss. Topeka, Kansas: 1883.]

Kansas occupies a large area in the centre of the North-American continent, and gradually sloping from the low bottoms and timber-lands on the Mississippi side up to the high treeless plains of the interior, affords a diversity of soil and variation of climate that renders its bird-life rich and varied. Col. Goss, fortified by observations in the field and the knowledge thereby gathered during twenty-six years' residence, is well qualified to carry out the request of the Executive Council of the State that he should prepare a catalogue of its Birds. This catalogue, arranged according to Mr. Ridgway's system and nomenclature, contains 320 species, of which 161 are known to breed in the State. The names of 29 other species which are likely to occur in Kansas are given in an appendix.

51. *Gould's 'Birds of New Guinea.'*

[The Birds of New Guinea and the adjacent Papuan Islands, including any new Species that may be discovered in Australia. By [the late] John Gould, F.R.S. &c. Part XVI. Folio. London: 1884.]

The sixteenth part of this work contains illustrations of the following species:—

Eclectus riedeli.
Megalurus albolimbatus.
Gerygone dorsalis.
Rhipidura opistherythra.
Pachycephalopsis fortis.
Pœcilodryas bimaculata.
Piezorhynchus castus.
Piezorhynchus vidua.
—— squamulatus.
Heteranax mundus.
Artamides unimodus.
Oriolus decipiens.
Philemon plumigenis.

Many of the species figured are, it will be observed, from specimens collected during Mr. H. O. Forbes's recent expedition to the Tenimber Islands.

Mr. Sharpe thinks it possible that the name *Eclectus riedeli* "will be found to have been superseded by *Eclectus westermanni* of Bonaparte." But we may point out that the type of *Psittacodis westermanni*, Bp., is in the Leyden Museum, and that it is not certain that the specimen in the British Museum to which Mr. Sharpe refers has been correctly attributed to *Eclectus westermanni*. Bonaparte (P. Z. S. 1850, p. 26) expressly characterizes the latter as "*iliis concoloribus*."

A new generic name (*Heteranax*) is proposed for *Monarcha mundus*, Sclater.

52. *Hartlaub on new African Birds.*

[Diagnosen einiger neuer Vögel aus dem östlichäquatorialen Africa. Von Dr. G. Hartlaub. Journ. f. Orn., Oct. 1883.]

Four new species, discovered by Dr. Emin Bey in Eastern Equatorial Africa, are shortly diagnosed as *Ptyrticus turdinus*, *Crateropus tenebrosus*, *Xenocichla orientalis*, and *Astrilda nonnula*. *Ptyrticus* is a new genus (of what family?).

53. *Holmberg on the Birds of the Sierra del Tandil.*

[Resultados científicos, especialmente zoológicos y botánicos, de los tres viajes llevados á cabo por el Dr. Holmberg, en 1881, 1882, y 1883 á la Sierra del Tandil. Actas de la Academia Nacional de Ciencias en Córdoba. Tomo V. Entrega primera. Buenos Ayres: 1884.]

Dr. Holmberg's three scientific expeditions into the Sierra of Tandil, in the Argentine Republic, in 1881 and the two following years, prove that this district is not rich in birds.

Examples of only about sixty species were obtained—all of them well-known inhabitants of the States of the Rio de la Plata.

54. *Huet on Birds in the Jardin des Plantes.*

[Note sur les naissances, dons et acquisitions de la ménagerie du muséum d'histoire naturelle, pendant les mois de mai, juin, juillet et août 1883. Par M. Huet. Bull. Soc. d'Acclimatation, Oct. 1883.]

M. Huet gives an account of the additions to the birds in the living collection at the Jardin des Plantes in the summer of 1883, and in particular records the hatching of four young Brush-Turkeys (*Talegalla lathami*) after a period of thirty days' "incubation" in their mound, and gives some interesting particulars of the young birds.

55. *Johnston's 'River Congo.'*

[The River Congo, from its mouth to Bólóbó, with a general Description of the Natural History and Anthropology of its Western Basin. 8vo. London: 1883.]

Mr. Johnston would not pretend to claim for his volume a comparison with Bates's 'Amazons' or Wallace's 'Indian Archipelago,' but every naturalist will read with pleasure the lively narrative of his journey up the Congo, from its mouth to Bólóbó. It is much to be regretted that Mr. Johnston had no collector with him, and that the specimens which he was actually able to bring home were few and imperfectly preserved. It has thus happened that in some cases the scientific names given in the present volume from memory or observation may not be strictly accurate. But we have a good general chapter on the bird-life of the Congo, concluding with a systematic list of species, in which there seem to be but few errors. There are likewise many bird-notes interspersed in the narrative, and woodcuts of various species. The Grey Parrot, we learn, is "found in incredible quantities on Stanley Pool," a Pratincole is common on the Congo, being found in "flocks of over a thousand at a time," and the Egyptian Goose, *Gypohierax,* Darters, and *Scopus um-*

bretta are likewise abundant. The Giant Plantain-eater (*Turacus giganteus*) was met with near Msuata; and Mr. Stanley says he has seen the *Balæniceps* on the upper river, and "describes it accurately."

Mr. Johnston is the first explorer of the Congo who has made any effort to investigate its natural products, which seem to have been rather ignored by the emissaries of the International Association. We trust, however, that before long some systematic attempts will be made to render its rich fauna and flora better known to the world of science.

56. *Meyer on a Grouse from Saxony.*

[Eine in Sachsen erlegte Rackelhenne. Von A. B. Meyer. Mitth. d. orn. Ver. in Wien, 1884.]

Dr. A. B. Meyer writes of a female specimen of *Tetrao medius* (*Tetrao urogallus* × *T. tetrix*), obtained near Dresden.

57. '*Ornithologist and Oologist.*'

[Ornithologist and Oologist. Vol. IX. No. 1. Pawtucket, R. I., January 1884.]

This number commences a new series of this popular American bird-periodical, which now enters upon its ninth volume.

58. *Radde and Pelzeln on Birds from the Caucasus.*

[Ueber eine Sendung von Vögeln aus dem Kaukasus. Vom Staatsrath Dr. E. Radde nebst einem Vorworte und Bemerkungen von A. von Pelzeln. Mittheilungen des ornithologischen Vereines in Wien, 1884, No. 1.]

Herr v. Pelzeln contributes some good critical notes to his list of a collection of birds from the Caucasus which Dr. Radde has lately sent through Crown-Prince Rudolf to the Vienna Museum. He makes *Ruticilla erythroprocta*, Gould =*R. ochrura* (Gm.). *Cf.* Schalow, J. f. O. 1880, p. 270.

59. *Report of the German Committee on the Migration of Birds.*

[VII. Jahresbericht (1882) des Ausschusses für Beobachtungsstationen der Vögel Deutschlands. J. f. O. 1884, p. 1.]

This interesting annual Report on the arrivals, dates of nesting, and departures of birds in Germany treats of 204 species. As usual, the facts are presented in a clear and concise manner.

60. *Report of the Austro-Hungarian Committee on the Migration of Birds.*

[I. Jahresbericht (1882) des Comités für ornithologische Beobachtungsstationen in Oesterreich und Ungarn. Royal 8vo. Wien: 1883.]

Observations or reports on migration are now the fashion, and in emulation of the efforts of the Northern Germans and ourselves, the Austro-Hungarians have entered the field with a strong committee under the patronage of the Crown-Prince Rudolf, and presided over by the Ritter von Tschusi zu Schmidhoffen. In 200 pages we have valuable observations upon the migration and distribution of 347 species; and of a surety the next writer on the Birds of Europe will have plenty of material, if only his lifetime and that of his assistants suffice for the digestion thereof.

61. *Schalow's Catalogue of the Seventh Exhibition of the Ægintha.*

[Catalog zur siebenten Ausstellung des deutschen Vereins für Vogelzucht und Acclimatisation (Aegintha) in Berlin vom 8. bis 12. Februar 1884 in den Räumen des Hauses Friedrich-Strasse 178, 1. Etage. 8vo. Berlin: 1884.]

Herr H. Schalow has kindly forwarded to us a copy of the catalogue of the seventh exhibition of the Ægintha, or German Union for Bird-breeding and Acclimatation, which took place in Berlin in February last. A good series of Parrots and other foreign birds, as well as of the more usually kept native families, appears to have been brought together.

62. *Selys-Longchamps on the Birds of Heligoland.*

[Excursion à l'Ile d'Heligoland en Septembre 1879. Par M. Edm. de Selys-Longchamps. Bull. Soc. Zool. France, 1882, p. 250.]

An interesting account of Mr. Gätke's famed collection.

63. *Sharpe on* Strix oustaleti.

[A Note on *Strix oustaleti*, Hartlaub. By R. Bowdler Sharpe. P. Z. S. 1882, p. 335.]

Mr. Sharpe shows that the so-called *Strix oustaleti* from Viti Levu is based upon a local form of the widely spread Grass-Owl (*Strix candida*).

64. *Sharpe on the correct Name of the Shámá.*

[On the correct Generic and Specific Name of the Indian Shámá. By R. Bowdler Sharpe. Ann. & Mag. Nat. Hist., July 1882.]

Mr. Sharpe gives good reasons for his conclusion that the best name for the Indian Shámá is *Cittocincla tricolor* (Vieill.). But, to be quite correct, the generic name should be written "*Cittocichla*," "cichla" (not "cincla") being the proper Latinized form of κίχλη.

65. *Stejneger on the Birds of Westland.*

[Andet Bidrag til Vestlandets ornithologiske Fauna. Af Leonard Stejneger. Nyt Magazin for Naturv. Christiania, 1882.]

Mr. Stejneger's second contribution to the ornithological fauna of Westland (a copy of which has only lately reached us, though it appears to have been published in 1882) contains notes on examples of *Motacilla melanope, Pyrrhula europæa, Cygnus bewickii,* and "*Urinator*" (i. e. *Colymbus*) *adamsi,* which have lately occurred in that part of Norway, and on the synonymy of the species. Mr. Stejneger vindicates the claim of the last-named species to be recognized as distinct from *Urinator immer*! (i. e. *Colymbus glacialis*).

66. *Stejneger on new Birds from Kamtschatka and the Commander Islands.*

[Diagnoses of new Species of Birds from Kamtschatka and the Commander Islands. By Leonard Stejneger. Proc. Biol. Soc. Washington, ii. 1882–84. Extras printed April 10th, 1884.]

Mr. Stejneger publishes, in "extras" from the 'Proceedings of the Biological Society of Washington,' diagnoses of five more "new species" of birds discovered during his recent expedition to Kamtschatka and the Commander Islands. These are entitled *Pica camtschatica, Corvus grebnitskii, Alauda blakistoni, Dendrocopus immaculatus,* and *Lagopus ridgwayi.* We never like to condemn species before seeing specimens of them; but, judging from the diagnoses and from what we know of the variations of such forms as *Pica caudata* and *Corvus corax,* we should be inclined to doubt whether some of these supposed species would be generally accepted.

67. *Swinburne's List of the Birds inhabiting the Islands of Sula Sgeir.*

[Notes on the Islands of Sula Sgeir, or North Barra and North Rona, with a List of the Birds inhabiting them. By John Swinburne. Proc. R. Physical Soc. Edinb. viii. p. 51.]

The writer gives an interesting epitome of the results of the visits of his predecessors (from 1594 to the present date) to these remote islands, the latter of which has been uninhabited since 1844, except during a few days at the annual shearing of the sheep which are pastured there. The principal interest of North Rona consists in the fact that the Fork-tailed or Leach's Petrel (*Thalassidroma leucorrhoa*) breeds there in considerable numbers. Eighteen species of birds were noted altogether.

68. *Vieillot's 'Analyse'* (reprint).

[Vieillot's Analyse d'une nouvelle Ornithologie Elémentaire. Edited by Howard Saunders, F.L.S., F.Z.S. London: 1883.]

This necessary work to all ornithologists has been reprinted by the Willughby Society, and issued to subscribers for 1883. Saunders, who has edited the reprint, gives in his preface a short account of Vieillot's life and labours.

69. *Vorderman's 'Birds of Batavia.'*

[Bataviasche Vogels door A. G. Vorderman. Part V. Overgedrukt uit het Natuurk. Tijds. Nederl. Indië, Deel xliii. Afl. 3.]

Mr. Vorderman continues his notes on the birds of the vicinity of Batavia (*cf.* Ibis, 1884, p. 111).

70. *Wagler's Six Ornithological Memoirs* (reprint).

[Wagler's Six Ornithological Memoirs from the 'Isis.' Edited by P. L. Sclater, M.A., Ph.D., F.R.S. London: 1884.]

Wagler's six memoirs are certainly the most important ornithological papers of the 'Isis;' and the Willughby Society has done a good work in reprinting them. If Boie's memoirs were treated in the same way, as we trust will be the case, the long series of this old German journal would cease to be an absolutely necessary component of the ornithologist's library.

XXXVIII.—*Letters, Announcements, &c.*

We have received the following letters addressed to the Editors of 'The Ibis:'—

Northrepps,
April 18, 1884.

Sirs,—In the last number of 'The Ibis' (*suprà*, p. 207) reference is made to Dr. Dybowski's valuable paper on the Birds of Kamtschatka, published in the Bull. Soc. Zool. de France, 1883, p. 351. In this paper, and also in one by Mr. Taczanowski at p. 329 of the same volume, *Astur atricapillus* is included as a species inhabiting Kamtschatka, the only authority for so regarding it being, as far as I am aware, a description of a young female Goshawk, referred by Mr. Taczanowski to this species, which is given at p. 331 of his paper just mentioned.

So far as my experience goes, it is not possible to distinguish with any certainty *Astur atricapillus* in the first year's plumage from *A. palumbarius* at a similar age; and I am therefore sceptical as to the former being really an Asiatic species, and cannot but think it more probable that the specimen described by Mr. Taczanowski is a young female of *A. palumbarius.*

I may take the opportunity of observing that the White Goshawk, for which Dr. Dybowski has proposed the appropriate name of "*candidissimus*," would seem to be the same as that which was described as "*Accipiter astur* β" in the Zoogr. Rosso-As. of Pallas, vol. i. p. 370. It is, however, worthy of remark that Pallas describes the colour of the iris as "flavissima" and Dybowski as "brunnea."

Yours &c.,
J. H. GURNEY.

SIRS,—Can you give space for the following argument and actual record of a very rare Scottish bird? The enclosed slips explain my object in pressing for the adoption of a uniform method of recording rare occurrences of birds and other migrational phenomena.

I do not desire to force my method upon anybody, be he editor, or journalist, or natural historian of any area; I only wish to test its usefulness, and to arrive at uniformity of method, whether my plan, or a better matured one, be adopted. Originality has its charms, no doubt, but utility of method I hold cannot be overrated.

I send this record in the form proposed (p. 350), and I also instance how easy it is to extend from it for more popular or, it may be, for more permanent historical record.

SCOTLAND. RECORD NO. 2. *Duplicate.*

Being a full text of the Record, written out direct from the Form.

On March 31st, 1884, at Pentland Skerries, in the Pentland Firth, *Ruticilla titys* (the Black Redstart)—a fine adult male—was shot by Mr. John Gilmour, lighthouse-keeper, at the locality named: it was roughly skinned, and sent to J.

SCOTLAND.
18—.

RECORD NO. 2.

Duplicate.

Occurrence of the Black Redstart, Ruticilla titys (*Scop.*), *at Pentland Skerries, Pentland Firth.*

Date.	Locality.	Species.	Age: ad. or young.	Sex.	Found alone	or with a flock	of its own species	or other species†.	Direction of wind and strength.	Prevailing wind of past few days.	Weather.
March 31st, 1884 ..	Pentland Skerries ..	*Ruticilla titys* (Scop.) ..	ad.	♂	..	*	..	*	Strong S.E.	S. and S.E. (3) ..	Clear on 28th; haze on 31st.

† If the latter, name the species:—1 Robin, several Sandpipers, 1 Yellow Bunting, 1 Chaffinch, Wheatears (called "Stonechats"), 1 Golden-crested Wren, 1 Common Thrush.

REMARKS.—Mr. John Gilmour, who shot this bird, did not know its name. He skinned it and sent me the rough skin, which I am having done up for our cabinet—*Mus. Feilden & Harvie-Brown.* Mr. G. writes:—"I have never seen a bird like it before." This is the furthest northerly record in Scotland up to date.

A. Harvie-Brown for identification, and it is now in the museum of Major H. W. Feilden and Harvie-Brown. It arrived with [a flock of] other migrants, amongst which were 1 Robin, several Sandpipers, 1 Yellow Bunting, 1 Chaffinch, Wheatears [locally and erroneously called "Stonechats"], 1 Golden-crested Wren, and 1 Common Thrush. Mr. Gilmour writes:—"I have never seen a bird like it before." It came with a strong S.E. wind, and a S. and S.E. wind had prevailed for some days (3) beforehand. The weather was clear on the 28th, but hazy on the 31st, or day of capture.

Note.—This may, we believe, be considered the most northerly record of the species in Britain up to date.

In conclusion, uniformity of method is a desideratum—a saving of time, labour, and thought. If some such form be adopted by all readers, how easy would it become for an editor, or any other party desirous of writing at length, to "read as he ran," and to transform the uniform records into extended and possibly more popularly useful and permanent ones. A single page, or at most two, of any periodical each month would provide ample space for the whole uniform records of that month. Query:—How many pages more would give the permanent information whenever it is desired to extend it, or to "write off," "compile," and "render permanently historical" the fauna, or this portion of the faunal account, of any county or faunal area? And Query:—Would it not be easier to sift the value of each record if it were primarily placed in some such form? also to illustrate this and to reply to it?

To correspond and ask for further data and corroborative facts in connexion with all records of rarities consumes the time of a working naturalist. To minimize this loss of time seems desirable.

Example.—A correspondent writes:—"Dear H.-B. You record in 'Ibis' for June 1884 the occurrence of *Ruticilla titys* from Pentland Skerries, dated 31st March, 1884. Please inform me time of day it was captured or first seen."

Instead of this, it might be:—"Dear H.-B.: *vide* Record

No. 2, June 1884, Ibis, p. 350, *Ruticilla titys.* Wanted, time of day first seen or captured."

The reason for this query *might be* that the correspondent wished to compare the time with an occurrence at some other contiguous station, or to correlate with it a large "rush" of migrants.

When one has often a dozen or more such letters to reply to, the time could be reduced by method.

Yours &c.,
J. A. Harvie-Brown,
Member Migration Committee of the Brit. Assoc.

Bremen, May 8, 1884.

Sirs,—As the Editors of 'The Ibis' (1884, p. 116) express certain doubts in regard to the validity of the newly described species of Ostrich (*Struthio molybdophanes*), I may state that, to all who have seen specimens alive, there can be not the slightest doubt that it is a good one. When in Basel (Switzerland) a fortnight ago, I had the pleasure of seeing a flock of twenty-six specimens in the Zoological Garden, deposited there by Mr. Carl Hagenbeck, of Hamburg. There were fifteen males, all adult, and eleven females. Afterwards I saw a pair in the small zoological garden of Mr. Nill at Stuttgart *. All the males agreed exactly with the characters pointed out by Dr. Reichenow—*i. e.* the naked parts of the head, neck, thighs, and legs were delicate slate-grey, instead of flesh-red, as in *Struthio camelus.* A very striking character in coloration of the naked parts is also that the bill, with the exception of the brownish tip, and the gape, as well as the middle portions of the front of the tibia, are fine pink. As it seemed to me, the species was smaller in size than *S. camelus.* But whether I may be right in the latter suggestion or not, the difference in the coloration of the naked parts is sufficient to distinguish the species at a glance; and as these characters are shown in a large number of specimens to be constant, I see no reason for not admitting this form of Ostrich as a distinct species. It has in every respect as much right to stand as a species as, for instance, *Rhea macrorhyncha*, Scl., or *Dromæus irroratus*, Bartlett.

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* This little garden contains very interesting hybrids (young and full-grown) of *Ursus arctos* and *Ursus maritimus.* One old specimen is in the museum of Stuttgart.

Struthio molybdophanes has been sent from the Somali country by the indefatigable collectors of Mr. Carl Hagenbeck, the well-known dealer of Hamburg, to whom science is indebted for many new and interesting animals introduced into the European market. Mr. Hagenbeck's latest expeditions to the Somali country have been especially fruitful. When in Hamburg last year, I had the pleasure, in a collection of animals just arrived from the Somali country, of seeing an example of a new species of Ass (*Equus*) and two new Antelopes.

Yours &c.,
O. Finsch.

Zoological Museum, Turin.
June 10th, 1884.

Sirs,—More than a year has elapsed since, having lost the use of my right arm and hand, I have been obliged to postpone to a better time the publication of the Introduction to my 'Ornitologia della Papuasia e delle Molucche,' which I hope to bring forward some day. In the meanwhile I am watching with great interest whatever appears relating to Papuan ornithology.

Among the papers recently published I wish to offer a few remarks first on part vii. of the "Contributions to the Zoology of New Guinea," by Mr. Ramsay (Pr. Linn. Soc. N. S. W. viii. pp. 15–29, June 1883). In this paper, already noticed in 'The Ibis,' 1884, p. 210, Mr. Ramsay describes several species as new.

(1) *Pœcilodryas sylvia*, p. 19. Evidently this is the bird which, in the 'Abstract' of the Proc. Linn. Soc. N. S. W., 31st January, 1883, p. 3, appeared as *Pœcilodryas melanoleuca*, and I have no doubt that this is the bird described by me as

Myiolestes bimaculatus, and which stands as *Pœcilodryas bimaculata* in the second part of my 'Ornitologia,' p. 85.

(2) *Myzomela eques,* var. This pretended variety of *M. eques* is described as wanting the red on the throat in the female, and as being, on the whole, a larger bird. I have already shown (*op. cit.* p. 302) that the specimens of *M. eques* vary a little as regards the dimensions; as to the female wanting the red on the throat, does not the specimen belong to another species, *M. obscura*?

(3) *Erythrura trichrea,* var. I have compared some New-Guinea specimens with others from Halmahera and Ternate (*E. modesta,* Wall.), and I have found that they are not different; the slight brown-yellow tint on the sides of the neck is scarcely perceptible and even wanting in some Moluccan specimens.

(4) *Eurostopodus astrolabæ.* From Mr. Ramsay's description I should say that the bird mentioned is no *Eurostopodus,* but a *Lyncornis,* and most likely *Lyncornis papuensis* (Schleg.).

(5) *Ægotheles? plumifera* may be a good species, but more specimens are required to settle its distinctness from *Æ. bennetti.*

(6) *Paradisea susannæ,* as already pointed out by the Editors of 'The Ibis,' is *P. decora,* Salv. & Godm.

(7) *Rhamphomantis rollesi.* The author does not point out in what respect his bird differs from *R. megarhynchus* (G. R. Gr.), the only known species of the genus, which is not even mentioned by Mr. Ramsay, and from his description it is impossible to gather what is the difference.

(8) *Sittella albifrons.* I cannot make out that this is different from *S. papuensis* (Schleg.), of which Mr. Ramsay makes no mention, although it is the only New-Guinea species previously known.

(9) *Æluraedus melanocephalus.* Mr. Ramsay compares this supposed new species with *Æ. arfakianus* and *Æ. melanotis,* but I must say that I have failed to catch in what respect it differs.

In conclusion I doubt whether any of the nine species or varieties described by Mr. Ramsay as new will really stand as such.

Very important papers are those published by Mr. Sclater on the "Timor-Laut or Tenimber Group of Islands" (P.Z.S. 1883, pp. 48–58, 194–200) and one by Dr. A. B. Meyer, 'Ueber neue und ungenügend bekannte Vögel,' etc. (pp. 1–64). It is impossible to give an opinion on the many new forms described in the last paper without actual comparison, but, judging from what I know of the geographical distribution of the birds in the Papuan subregion, I should say that several forms from Timor-Laut, described as new by Dr. Meyer, and which by Mr. Sclater have been attributed to Ké-Islands species, must be really distinct. I think that such will be found to be the case with *Geoffroyus timorlaoënsis* and *Philemon timorlaoënsis*. Rather unexpected comes the new *Artamus musschenbroeki*, Meyer, allied to *A. leucogaster*; doubtfully good species appear to me *Calornis circumscripta* and *Ptilopus flavovirescens*.

As to the *Urospizias* from Timor-Laut, which Dr. Meyer attributes with a query to *U. albiventris*, Salvad., from the Ké Islands, I suspect that it must be a different species. I take this opportunity to mention that *U. albiventris* is missing in the very recent and important 'List of the Diurnal Birds of Prey,' by Mr. Gurney.

Also I am much inclined to think that the bird from Timor-Laut attributed by Mr. Sclater to *Corvus validissimus* must belong to a different species, as the true *C. validissimus* inhabits a very limited region, and, from what I know, is only to be found in the group of Halmahera, or Northern Moluccas, and does not even reach the Amboyna or Ceram group. Furthermore, *Dicruropsis bracteata* and *Stigmatops squamata* from Timor-Laut, the last doubtfully identified by Mr. Sclater, require comparison.

Lastly, I wish to point out that in a recent paper by Dr. Finsch, "Ueber Vögel der Südsee," at p. 29, the *Goura* from Port Moresby is called *G. scheepmakeri*. It seems that Dr. Finsch has only obtained an adult male (No. 1386); still he adds that the young birds want the brown-chestnut tip to the wing-coverts, and that they quite agree, even in the smallest particulars, with the description of the type specimen. It follows from this that Dr. Finsch identifies with his *G. scheepmakeri* the bird which I have named *Goura albertisi*. I do not wish to repeat here all the reasons which, in two papers published by me on the subject, I have adduced before coming to the conclusion that the specimens of the genus *Goura* from Hall Bay, which are similar to those from Port Moresby, are specifically different from the type of *G. scheepmakeri*, with which I carefully compared several of them. Those reasons have been recapitulated in my 'Ornitologia,' iii. p. 205. Here I only wish to bring forward two arguments which disprove Dr. Finsch's identification :—

1st. The type of *G. scheepmakeri* has the wing-speculum, formed by the greater coverts of the secondaries, of a much darker grey than several adult birds and a young specimen seen by me of my *G. albertisi*; all these have the speculum grey, exactly of the same colour. It is worth noticing that in the allied species, *G. sclateri*, the young birds have not the speculum darker than the adult.

2nd. Dr. Finsch told me that he received the type specimen of *G. scheepmakeri* from somebody of the Leiden Museum, and that most likely it had been obtained by Solomon Müller near Princess Marianna Straits. If such is the case it is utterly impossible that *G. scheepmakeri* should be identical with my *G. albertisi*, as between the area supposed to be inhabited by *G. scheepmakeri* and that inhabited by *G. albertisi* there is the extensive region, through which runs the Fly river, which is inhabited by *Goura sclateri*, quite different from both.

Yours &c.,
T. Salvadori.

Mr. Whitely has kindly sent us the following extracts from a letter received from his son, the well-known collector Mr. Henry Whitely, dated from his encampment in the interior of British Guiana, one day's journey from Roraima (*cf.* Ibis, 1882, p. 76, and 1883, p. 203).

"Roraima, Oct. 15, 1883.

"I have been away from my camp for six weeks near Roraima, and have ascended the slope twice to the foot of the vertical rock, which is over 7000 feet in height; so that the height of the mountain must be nearly 9000 feet. I have made a lot of observations for the R. G. S.; but these are too long to copy now, as the Indian who takes this letter down starts today. I shall be here probably six months longer, and shall then move down to the river Caramang, where I may stay three or four months collecting. But I shall not go on to the Merumé Mountains, but come straight on from Caramang to Camasaca, and thence to Bartica Grove. My collection up to the present time is a very fine one. I have got over thirty species more to be added to the birds of British Guiana. I have bought four 'woodskins,' which are stationed on the Atapunam, and my two boats are on the Curubury river; so that I have kept open the means of getting back. But you must not be anxious if you do not receive letters, as it is very difficult to get them sent. I have got specimens of *Campylopterus hyperythrus, Lophornis pavoninus, Diglossa major,* and another beautiful little *Lophornis,* with a chestnut-brown crown and spangled whiskers; likewise a few more males of *Heliodoxa xanthogonys*; but this is a rare bird. The female of *L. pavoninus* is a very interesting bird, beautifully speckled on the throat and breast. I am very busy with the butterflies now. When I arrived here I put up a very large house, just below where I was collecting last time, near a wood, as the Indians told me I should get no leaves for thatching nearer to Roraima, which was true, I found. I waited some months till the birds were in good plumage, and then went on to Roraima; it is one day's journey. I am not very high here, and it was not more than 3700 feet when I got to the foot of Roraima. I found some Indian huts there, and two of these the Indians gave up to me. The huts were on the Savannah (height about 3000 feet); but I sent my Indians up on the mountain to a height of 5500 feet, and kept four Indian boys going up every day to bring me down the birds. I was up three times myself. I had a path cut through the forest to get to a place whence I thought it was possible to ascend the mountain; and I took fourteen Indians with me to make the attempt, but found it impossible with the means at our command. I have made plans of the mountains, but must leave them until I arrive in England, and then I will write another paper for the R. G. S. I have a large field here planted with cassava. I do not know whether it will be ready by the time I shall leave, but I have taken all these precautions in case of necessity. At any rate, it will come in for the Indians, who have kept me well supplied with food. I planted some of my seeds, but they came up and then died off. I suppose the soil was not suited for them; the only things that came up well and that I enjoyed, too, were the radishes. You may imagine that I am very busy now. I have made two journeys away from my house—one to Roraima, and the other to get *Lophornis pavoninus*; but I shall make no more till I start for the Caramang, as my boots are getting rather worn. I only brought two pairs with me, and I must preserve one pair for coming back. I have got lots of fowls, so that I eat one now and again for Sunday's dinner, and have also lots of eggs. I took plenty of benzine collas with me, and have washed with arsenical soap the feet and bills of the birds, so that my collection is in fine order. I have got a fine *Penelope*, much larger than *P. marail*, and also some different Hawks and Owls and a tiny little Dove. I hope to be in Georgetown by August or September of next year. You can still address newspapers and letters to Bartica Grove, and, if opportunity offers, the Rev. Mr. Kellan will forward them to me, just as he sent me the last packet."

News of Travellers and Collectors.—Herr F. Bohndorff "the last man who left Khartoum before it was hemmed in," has brought back a good series of birds, collected in the

Niam-niam country, where he accompanied Dr. Junker during his recent expedition. A set of these have been secured for the National Collection; and Mr. Sharpe has exhibited some of the more striking forms at a recent meeting of the Linnean Society. We observed fine examples of *Turacus giganteus, Corythaix schuetti, Musophaga rossæ,* and of *Buceros atratus,* and other species, which indicate that the fauna of the West Coast extends into the valley of the Welle. Mr. Sharpe has described several species of the collection as new, amongst which are *Crateropus bohndorffi, Sigmodus griseimentalis,* and *Pionias bohndorffi.*

Mr. C. W. Rosset, who was with Dr. Riebeck in Socotra, is just preparing to start for Ceylon, whence, after a short stay, he will make an excursion to the Maldives and Laccadives, and endeavour to increase our somewhat scanty knowledge of their fauna and flora. His address is to the care of the German Consulate, Colombo, Ceylon.

Mr. H. O. Forbes is in London and busy preparing a volume on his experiences in the Eastern Archipelago. This completed, he proposes to return to the East and explore the Owen-Stanley range in South-eastern New Guinea, making his way, if possible, from Port Moresby to the eastern coast of the great peninsula.

Of Mr. Henry Whitely's recent doings in British Guiana we have been able to give an account in his own words. Mr. E. F. im Thurn, who is now settled as a magistrate in the Pomeroon-River district in the same colony, is likewise anxious to have a try to get to the summit of Roraima, and has issued amongst his friends a printed appeal on this subject, which has attracted considerable notice, and will probably be brought before the British Association at their Montreal meeting.

Dr. F. Leuthner is also making preparations for a naturalist's excursion to South America, and has selected the Upper Orinoco as a locality hitherto little explored, for which he hopes to be able to depart this autumn.

M. Taczanowski informs us that the two collectors of the Warsaw Museum, Messrs. Stolzmann and Siemiradzski, have suffered somewhat in health in Western Ecuador, and will return to Europe with their collections at the close of this year.

New Birds in the Zoological Society's Gardens.—Some very interesting birds have lately been added to the Zoological Society's living collection. Three fine males of the Lesser Bird of Paradise (*Paradisea minor*) have been brought home from New Guinea by Mr. Kettlewell, of the steam-yacht 'Marchesa.' In the Parrot-house is also a fine example of the curious *Cochoa viridis* of the Himalayas, the first, we believe, that has reached Europe alive. In one of the large bird-cages in the Insect-house are a pair of *Eclectus polychlorus* (green male and red female), which get on so well together that it is hoped they may take to nesting. In the same building is to be seen a fine specimen of a most remarkable Ground-Cuckoo (*Carpococcyx radiatus*), which in gait and habits clearly betrays the Gallinaceous affinities of the Cuculidæ predicted of them by Garrod and Forbes from their internal structure.

Other birds, not elsewhere to be seen alive, are examples of *Zosterops palpebrosus* of India and *Z. simplex* of China, and a specimen of the very singular Polyborine form, *Polyboroides typicus*, from West Africa.

Rochebrune v. *Nitzsch.*—In the second livraison of vol. viii. of the 'Actes' of the Linnean Society of Bordeaux (March 1884), Dr. A. T. de Rochebrune, Assistant Naturalist at the Museum of Paris, has commenced what promises to be an important memoir on the Birds of Senegambia. We will defer a general notice of this work until its conclusion; but we wish to call attention to Dr. Rochebrune's chapter on the axillary plume of the bird's feather in different groups, in which he most positively controverts some of Nitzsch's dicta on this subject. Nitzsch's conclusions on other points of the structure of birds which he examined are so uniformly accurate that it is difficult to believe that he can have made so many erroneous observations on the axillary plume as Dr. Rochebrune imputes to him.

Houbaras as Food.—"Three Houbaras were shot, and on our arrival in camp (between Souakin and Cassala) we found the cook-boy had caught one in a noose: we were glad to discover sporting tendencies in our servants. I never ate a more delicious bird than the Houbara. It is but too frequently the case that the game of these countries is dry and unpalatable—at any rate, it would be thought so in civilized countries; but this bird would be a great delicacy anywhere. Its flesh when cooked is dark brown and firm, very much resembling that of a Goose, and has a flavour entirely its own. The birds that we shot were very fat, in excellent condition, and were very good eating, both hot and cold."—*James's Wild Tribes of the Soudan.*

News of the Kilima-ndjaro Expedition.—Letters have been received from Mr. H. H. Johnston dated from the British Residency, Zanzibar, May 13th. After consultation with Sir John Kirk, Mr. Johnston had selected the Mombasa route for Kilima-ndjaro, and was expecting to depart for that port in about a fortnight's time. The country between Mombasa and Chaga was said to be quiet, and to present no serious difficulties in the way. Mr. Johnston had succeeded in obtaining the services of three of the bird-skinners that had been employed by Dr. Fischer, and of a botanical collector trained under Sir John Kirk, of whose kindness and assistance he speaks in the highest terms. Mr. Johnston, in spite of the trying climate of Zanzibar, was in excellent health and had strong hopes of the success of the expedition.

Ridgway Ornithological Club, Chicago.—At the monthly meeting held March 6th last, after the reception of donations and election of new members and regular business of the meeting, Mr. B. T. Gault read a paper on *Picus nuttalli*, with an account of its nesting in California. Mr. G. L. Toppan exhibited a fine male *Milvulus tyrannus*, with tail

10½ inches long, lately collected in California. Mr. H. K. Coale made comparisons (illustrated with the specimens) between *Cypseloides niger borealis* from Colorado and *Cypselus apus* of Europe.

Hodgson's Ornithological Drawings.—The Library of the Zoological Society of London has received a very important addition in the shape of the original set of Mr. Brian H. Hodgson's drawings of Himalayan birds, prepared by native artists under Mr. Hodgson's superintendence during his long residence in Nipal and Sikhim. The series comprises 1104 sheets, and will, when bound, form 12 volumes. For the last twelve years the drawings have been lent to Mr. Allan Hume, who has now handed them over to the Society at the request of Mr. Hodgson.

The late Count E. Turati's Collection.—Count Salvadori informs us that the splendid collection of mounted birds belonging to the late Count E. Turati has been presented to the city of Milan. We trust that every care will be taken of this valuable series, which contains many types and ornithic rarities.

Anniversary Meeting of the British Ornithologists' Union.—The Annual Meeting of the B. O. U. was held at 6 Tenterden Street on Wednesday the 21st May, at 6 P.M., Mr. Sclater in the Chair, Lord Lilford (the President) being unavoidably absent through illness.

The Minutes of the last Meeting having been read and confirmed, the B. O. U. Committee presented the following Report:—The original number of Members when the B. O. U. was founded in 1859 was only twenty. At the last Anniversary the Union consisted of 125 Ordinary Members, 1 Extraordinary Member, 9 Honorary Members, and 19 Foreign Members, making a total of 154 Members. Of these 13 are Original Members, so that we have only to regret the loss of seven of the founders of the Union. Since the last Anniversary Meeting the losses by death have been five, viz. two Ordinary Members (Mr. W. A. Forbes and Mr.

William Forster) and three Foreign Members (Dr. W. C. H. Peters, Professor Reinhardt, and Dr. H. Schlegel), making the present list consist of 123 Ordinary, 1 Extraordinary, 9 Honorary, and 16 Foreign Members—together 149 Members. The Candidates for admission to the Union at this Meeting are sixteen, which is the largest number proposed at any Anniversary since the foundation of the Union, and gives evidence of the increasing popularity of the B. O. U.

The Accounts for the volume of 'The Ibis' for 1883, as also for the 'Ibis List of British Birds,' having been discussed and passed, the following new members were balloted for and duly elected:—Geoffrey Fowell Buxton, Sunny Hill, Thorpe, Norwich; Joseph Whitaker, Rainworth Lodge, Mansfield; Major E. A. Butler, Belfast; C. J. Holdsworth, Wilmslow, Cheshire; Capt. C. T. Bingham, Moulmein, Burmah; Lieut. Henry Barnes, Commissariat Department, India; William Ruxton Davison, Ootacamund, South India; J. G. Goodchild, 28 Jermyn Street, S.W.; Henry Ogg Forbes, Rubislaw Den, Aberdeen; Herbert Langton, 115 Queen's Road, Brighton; R. L. Patterson, Croft House, Holywood, co. Down; H. Heywood Jones, Larkhill, West Derby, Liverpool; Frank E. Beddard, Zoological Society's Gardens, N.W.; Abel Chapman, Silksworth House, Sunderland; A. S. Vesey, 3 Campden Villas, Barnes; and W. C. Tait, Oporto.

The following officers were elected for the year 1884–5:—*President*, The Right Hon. Lord Lilford; *Secretary*, H. E. Dresser, Esq.; *Editors*, P. L. Sclater, Esq., and Howard Saunders, Esq. Mr. F. DuCane Godman was elected on the Committee in place of Mr. W. B. Tegetmeier, who retired by rotation. A vote of thanks to the Chairman was proposed by Mr. G. C. Taylor, seconded by Mr. W. H. Hudleston, and carried unanimously. Mr. R. Bowdler Sharpe exhibited and made a few remarks on the peculiar new European Nuthatch (*Sitta whiteheadi*) lately discovered by Mr. Whitehead in the mountains of Corsica. The Meeting then adjourned, and the Annual Dinner was, as usual, held, and was attended by about thirty Members and guests.

Obituary. PROFESSOR SCHLEGEL.—Our Foreign Member, Hermann Schlegel, the late distinguished Director of the Leiden Museum and author of many well-known ornithological works, was of German origin, and was born at Altenburg, in Saxony, in 1804. Inspired by an innate love of natural objects, and not being satisfied to follow his father's trade, Schlegel betook himself, when quite young, to the study of zoology at Vienna, whence, in 1825, he was induced to go to Leiden, in the hope of obtaining an appointment as Naturalist in the East-Indian possessions of Holland. The vacant post having been already filled, Schlegel was obliged to content himself at first with being amanuensis to Temminck, but a few years later (29th November, 1828) was appointed Conservator of the Museum. Upon Temminck's death in 1858, Schlegel was named Director, and Prof. Van der Hoeven, whose claims it was difficult to ignore, Over-Director of the Museum. This unsatisfactory arrangement did not last long; and in 1860 Schlegel became sole Director by Van der Hoeven's resignation, and retained the post until his death, on the 17th of January last. Schlegel was a highly cultivated man in many respects, and wrote and spoke German, French, Dutch, and English with equal facility. His fluency in English was wonderful for one who had never been in our country. His best-known ornithological works are those on the birds of Holland ('De Vogels van Nederland beschreven en afgebeeld'), published at Leiden, 1854–58; his 'Revue Critique des oiseaux d'Europe' (1844); the 'Recherches sur la Faune de Madagascar' (1868), prepared in conjunction with the traveller Pollen; the 'Monographie des Loxiens,' written jointly by him and Prince Charles Bonaparte; and the 'Revue méthodique et critique des collections du Muséum d'Histoire Naturelle des Pays-Bas.' This last-named work, which on its completion was arranged to form eight thin volumes, although prepared in a somewhat superficial way, and in accordance with the occasionally fanciful views of affinities held by its illustrious author, will long remain a most important work of reference to ornithologists who are engaged upon the study of the ornis of the Oriental Region.

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XXXIX.—*Notes on the Birds of the Pyrenees.*

By Howard Saunders.

In publishing these observations on the ornithology of the Pyrenees, I do not pretend to have explored the whole of that great mountain-chain, or even to have worked up any district except the western one. To have done this, even imperfectly, it would have been necessary to spend at least three springs and summers in various portions of the chain; and to obtain the best results it is absolutely necessary that the naturalist should make the Spanish side his principal collecting-ground, a course which would involve considerable hardship. As regards the French side, where all reasonable comforts can be obtained, the word "Pyrenees," in the tourist sense of the word, means the "show-district," bounded by Eaux-Chaudes, Eaux-Bonnes, and Gabas on the west, and by Luchon and Venasque on the east—a mountain-mass partially pierced by narrow gorges and containing the most lofty summits, unfavourable therefore, on the whole, to bird-life. I have visited this district, but never having been able to remain there later than the month of May, my experiences are limited. In that portion of the eastern district which lies between Venasque and Prats de Molló I have not yet been; but I know something of the Catalan portion on both sides of the frontier, owing to an autumn visit to Amélie-les-Bains and excursions round Mont Canigou; also to many conversations with Dr. Alfred Bardou, of Fontainebleau, whom I met there, and his collectors. He was an agreeable, although somewhat eccentric, companion, whose delight was to wander about the mountains, living with the peasantry, doctoring them gratis, and collecting eggs. He would never allow a gun to be taken out with him, and instant dismissal from his employ would have followed the destruction of any bird from the nest, whether for identification or any other reason. To him I am indebted for some thoroughly trustworthy information about many of the Pyrenean birds; but, unfortunately, nothing would induce him to publish his experiences. It would be interesting to know what has become of his collection of eggs, which must have been a very fine one, and his notes, if any. Every thing was sold at his death; but I can learn no particulars, for to amateur naturalists in France he seems to have been quite unknown. At Perpignan, also, I was acquainted with the late Dr. Louis Companyó, who published in 1863 his 'Histoire naturelle des Pyrénées-Orientales,' containing many interesting details about birds. He was a fine old man, who had been an army surgeon during the Peninsular war, over eighty years of age at the time that I knew him, but still vigorous, and delighted to talk over his recollections of Spain. His catalogue is useful to any one having some previous knowledge of the country and its fauna; but to those at a distance it is a double-edged tool, for, with increasing age, the venerable doctor got rather confused about his scientific names. Still, he was a field-naturalist, and by their Catalan names he knew his feathered friends and their habits well enough. As regards the district of which Bagnères-de-Bigorre forms the centre, it has been explored better than any other by a working naturalist, the late M. Philippe, whose widow and daughters still prepare a few birds brought in by the guides and isard-hunters. Thanks to the courtesy of the Director of the College of Oloron, where what remains of Philippe's collection is still to be seen, I possess a copy of his extremely rare 'Ornithologie Pyrénéenne,' published in 1873, after his death, from his notes, by M. Cazes. This catalogue would be exceedingly interesting, but for the fact that the editor has incorporated a number of passages which, from the manner in which they are inserted in the original MS., are evidently either hearsay or mere extracts from other writers, for guidance and comparison. It is only by being able to separate these that the work becomes of value; but of the conscientiousness of the writer there can be no doubt.

The district with which I am best acquainted is that lower and comparatively wooded portion which lies between the Val d'Aspe and the sea. During two winters and early springs passed at St. Jean-de-Luz I made many excursions, and have traversed the intervening ridges in all directions down to Pamplona, to reach which the main chain has to be crossed. Comparatively few people appear to be aware that it is not the main chain, but a mere spur of the Pyrenees, which is seen by the traveller on his left as he approaches the frontier at the Bidassoa. The main line of the Pyrenees is crossed far in Spanish territory, about Zumárraga, and continues westward under the name of the Cantabrian range; but about the latter portion I have nothing to say at present. As regards the Basque country and Navarre, the passes do not exceed 5000 feet in height, and most of their lower slopes are clothed with chestnut, beech, and oak. In the great forest of Iraty there are, however, many square miles of superb firs; but, like most large forests, it is not rich in species of birds. Unfortunately, it is practically impossible for any one residing at St. Jean-de-Luz to carry a gun through the small mountain-passes on the immediate frontier, owing to the sharp look-out kept for Carlists. That this precaution is by no means unnecessary, is shown by the recent raid made through the Valcarlos (which is the lower part of the Roncesvalles pass) to Orbaiceta; that it is undesirable to expose one's self to suspicion, is shown by the marvellous promptitude with which the Carlist invaders were placed in that condition which, according to Cromwell, "hath no fellow!" In the greater part of Spain there is no difficulty whatever about a gun, but just on the frontier it is different. And to have given my proper address at St. Jean-de-Luz would at any time have insured the attention of the authorities, for that place was the hot-bed of Carlist plots and the watch-point of the faction.

So much for my own experiences, which are merely set down in order that my readers may know how far I have been, and whence my sources of information are derived. But to supplement my defective knowledge of the French side, there is a work entitled 'Catalogue raisonné des Oiseaux observés dans les Pyrénées françaises et les régions limitrophés,' by M. Adrien Lacroix, of Toulouse, whose acquaintance I had the pleasure of making a few years ago, when I was enabled to inspect his collection of specimens obtained in the Pyrenees and the neighbourhood. At his residence, in the sunny plains of Gascony, M. Lacroix has collected information respecting the birds obtained or observed in the Departments of Haute-Garonne, Aude, Ariège, Gers, Hérault, Haute-Pyrénées, Tarn, Tarn-et-Garonne, and Pyrénées-Orientales, the result being a list of about 350 species, many of them of considerable interest. M. Lacroix has made various excursions into the mountains, and can by no means be considered a mere cabinet naturalist; but still there are some points upon which it would be satisfactory to have corroborative details. It is not my intention to swell the list by making a complete catalogue of the species which are, or ought to be, found in the Pyrenees; therefore, with the exception of a few rarities, such as Pallas's Sand-Grouse, only those are set down which I have myself seen alive or recently killed, and many species are excluded which undoubtedly occur, but which I do not find noted in my memoranda.

1. TURDUS VISCIVORUS, Linn.

The Missel-Thrush is common and resident. I observed it nesting in Navarre, at an elevation of 3000 feet, on the 11th of April.

2. Turdus musicus, Linn.

The Song-Thrush is abundant on its migration in February and March, and I have seen eggs taken in the Basque Provinces; but my impression is that only a few remain to breed.

3. Turdus iliacus, Linn.

The Redwing was numerous in March about St. Jean-de-Luz.

4. Turdus pilaris, Linn.

The Fieldfare is of rare or irregular occurrence in the western districts, where I only saw it once; more abundant on passage towards the centre. Philippe and others assert that a few pairs remain to breed in the higher woods.

In the Museum at Bayonne there is an example of White's Thrush, *Oreocincla varia,* shot in the district in 1871.

5. Turdus merula, Linn.

The Blackbird is a resident species, its numbers being augmented during migration.

6. Turdus torquatus, Linn.

The Ring-Ouzel was abundant in March about Argelès, where it is known as the "Pic Mars." I also saw it and heard it near Roncesvalles in April, so it was doubtless breeding there.

7. Monticola saxatilis (Linn.).

The Rock-Thrush is tolerably common in the mountains from April to September, and nests close to Bagnères-de-Bigorre, where I observed it early in May 1879.

8. Monticola cyanus (Linn.).

The Blue Rock-Thrush was observed by me daily in the warm dry Catalonian Pyrenees in November 1876, so that it is probably resident there. In the colder districts it arrives in April, and in the Basque Provinces I did not see it at all.

9. Cinclus aquaticus, Bechst.

The Dipper is common on all the mountain-streams. A skin which I brought back is referable to the form named *C. albicollis*.

10. Saxicola œnanthe (Linn.).

The Common Wheatear arrived at St. Jean-de-Luz from the south on the 25th of March.

11. Saxicola albicollis, Vieill.

Several separate parties of the Black-eared Chat arrived at the same time with the preceding.

12. Saxicola leucura.

The Black Chat was observed by me daily above Amélie-les-Bains, in the Eastern Pyrenees, in November 1876; but until then Lacroix was not aware of its existence in any part of the range.

13. Pratincola rubetra (Linn.).

The Whinchat was seen in Navarre in April.

14. Pratincola rubicola (Linn.).

The Stonechat is common and resident.

15. Ruticilla phœnicurus (Linn.).

The first male Redstart was observed at St. Jean-de-Luz on the 18th of March.

16. Ruticilla titys (Scop.).

The Black Redstart was tolerably common during the winter about ruins, and even on the rocks by the sea-shore at St. Jean-de-Luz; but by April nearly all the birds seemed to have retired to the mountains, where I saw many.

17. Cyanecula wolfi, C. L. Brehm.

I shot a White-spotted Bluethroat near St. Jean-de-Luz on the 16th of April, but it probably arrives rather earlier.

18. Erithacus rubecula (Linn.).

The Redbreast is tolerably common and resident.

19. Daulias luscinia (Linn.).

The first Nightingale was observed near St. Jean-de-Luz on the 8th of April.

20. Sylvia rufa (Bodd.).

The Whitethroat's arrival at St. Jean-de-Luz was first noticed on the 4th of April. The Lesser Whitethroat (*S. curruca*) was not observed by me, and in the Basque Provinces I believe it is very rare on migration.

21. Sylvia melanocephala (Gm.).

The Sardinian Warbler seems to be a resident in the lower districts; I saw it daily near Amélie-les-Bains in November.

22. Sylvia atricapilla (Linn.).

The Blackcap was observed at St. Jean-de-Luz on and subsequently to the 7th of March.

23. Melizophilus undatus (Bodd.).

The Dartford Warbler is tolerably common and resident on the gorse-covered hills of the Basque Provinces; I also saw it in the Eastern Pyrenees in November.

24. Regulus cristatus, Koch.

25. Regulus ignicapillus (C. L. Brehm).

Both the Goldcrest and the Fire-crest were frequently observed in winter and early spring near St. Jean-de-Luz. The former species was exceedingly tame, seeking food on the gorse regardless of the proximity of the observer. The Fire-crests often came quite close; but they seemed much more restless, and, instead of working steadily round the same bush, they would shoot off rapidly to another after a very short stay.

26. Phylloscopus collybita (Vieill.).

27. Phylloscopus trochilus (Linn.).

Some Chiffchaffs were to be seen at St. Jean-de-Luz throughout the winter; others arrived in March. The Willow-Wren was first noticed on the 8th of that month. My departure for the mountains prevented any observations upon other Warblers.

28. Accentor collaris (Scop.).

The Alpine Accentor was only seen by me on the Higher Pyrenees in March and May; never in the Basque and Navarrese districts.

29. Accentor modularis (Linn.).

The Hedge-Sparrow appears to be resident on the lower grounds, but it is not numerous.

30. Acredula irbyi.

This form of Long-tailed Tit was several times observed on the tall poplars along the highroad from Bayonne to Spain, and also in the Argelès valley.

31. Parus major, Linn.
32. Parus ater, Linn.
33. Parus cæruleus, Linn.

The Great, Blue, and Coal Tits were frequently observed, the latter being especially abundant in the middle belt of forests in company with the Crested Tits.

34. Parus palustris, Linn.

The Marsh-Tit appeared to be rather rare, and confined to the lower grounds by the Nivelle and neighbouring streams.

35. Lophophanes cristatus (Linn.).

A few Crested Tits were always to be seen in the woods round St. Jean-de-Luz, but in the great forest of Iraty and the woods of the Higher Pyrenees this species was more numerous than all the others together.

36. Sitta cæsia, Wolf.

The Common Nuthatch is abundant and resident in the chestnut and beech woods, where its loud *tui-tui-tui* might frequently be heard.

37. Certhia familiaris, Linn.

The Common Creeper is resident.

38. Tichodroma muraria (Linn.).

The Wall-Creeper, in spite of the brilliant crimson of its wings, is a species which may easily be overlooked on the rocky precipices which form the sides of the deep gorges. Mr. Seebohm told me that he had observed it about Pierrefitte in March 1882; but I was not so fortunate as regards that locality. In the arid ravines of the Eastern Pyrenees, where the sun still strikes fiercely in November, I have seen it several times with extended wings basking like a butterfly; but it leaves the higher mountains in September, returning in March. As bearing upon its two recorded visits to England (which, however, in spite of their authorities, have not obtained sufficient credence to procure its admission to the B. O. U. List of British birds), I may remark that four or five examples have been obtained at Nantes, in Lower Brittany, several of them on the walls of the old Château, within a few yards of the noise and bustle of crowded quays and steam tramways.

39. TROGLODYTES PARVULUS, Koch.

The Common Wren is a familiar resident.

40. MOTACILLA ALBA, Linn.

41. MOTACILLA LUGUBRIS, Temm.

Both the White and the Pied Wagtails were observed at St. Jean-de-Luz from December to the end of March, after which they disappeared. Our bird was in full black plumage in December, and was frequently to be seen strutting about the road in proximity to its longer-tailed congener, the White Wagtail, which was also in full plumage. Judging from the gradations of colour observed in fully adult specimens, it is my impression that the two species interbreed; but the birds persistently frequented washing-places and highroads, where it was impossible to shoot, so that I did not obtain a specimen. Their sudden departure took me by surprise, for I had made up my mind to secure a Pied and a White Wagtail which had apparently been paired for at least a fortnight. There was a considerable arrival of Pied Wagtails early in March.

42. MOTACILLA MELANOPE, Pall.

The Grey Wagtail is of general distribution, not merely on the streams and brooks, but also on the flat land at the foot of the mountains. At the baths of Dax, by the Adour, in the Landes, a pair frequented the courtyard of the hotel, sometimes entering the open windows of the corridors in search of flies with the utmost familiarity.

43. Motacilla flava, Linn.

44. Motacilla raii, Bp.

From the 28th January onwards the Blue-headed Yellow Wagtail was tolerably common among the cattle on the pastures about St. Jean-de-Luz. The Yellow Wagtail was first observed on the 10th of April by the banks of the Iraty river, in close attendance on some grazing ponies.

45. Anthus pratensis (Linn.).

46. Anthus trivialis (Linn.).

The Meadow-Pipit was very common in winter and spring. The Tree-Pipit was obtained on and after the 12th February.

47. Anthus spipoletta (Linn.).

The Water-Pipit was occasionally observed by the river-banks in February; but later in the year it became abundant on the hill-tops, and early in May swarms were migrating up the Val-de-Lys, near Luchon, on the way to their mountain breeding-grounds. I believe I saw the Rock-Pipit (*A. obscurus*) on the rocks by St. Jean-de-Luz.

48. Lanius meridionalis, Temm.

There is a genuine specimen of the Southern Grey Shrike, shot on the 10th of February, in the Bayonne Museum, but it is, of course, a very rare straggler.

Lanius excubitor had not arrived before my departure; at least I did not see it.

49. Lanius pomeranus, Sparrm.

The first Woodchat-Shrike was observed in Navarre on the 11th of April; later it is exceedingly common.

50. Muscicapa atricapilla, Linn.

The Pied Flycatcher was obtained on migration in the woods near St. Jean-de-Luz on the 17th of April.

51. Hirundo rustica, Linn.

The first Swallow was seen at St. Jean-de-Luz on the 25th of March.

52. Chelidon urbica (Linn.).

There is a single specimen of the House-Martin in the

Bayonne Museum; but this species is extremely rare in the Western Pyrenees, although the overhanging eaves of the Basque and Navarrese houses appear very suitable for its nests. A sharp look-out was kept for the latter, but no trace of them was noticed as far east as the Val d'Aspe. The House-Martin breeds abundantly at St. Sauveur and near Luchon. In the gorges of the Eastern Pyrenees I observed it as late as the 29th October, hawking for insects, at the same time and place as the next species, but always lower down, close to the mountain-torrents.

53. COTILE RUPESTRIS (Scop.).

The Crag-Martin is resident throughout the year, from the Pas de Roland, near Cambo, to the gorges of the Eastern Pyrenees.

54. CARDUELIS ELEGANS, Steph.

The Goldfinch is generally distributed; on the Spanish slope from Roncesvalles to Pamplona it was more abundant in spring than any other species of bird.

55. CRYSOMITRIS SPINUS (Linn.).

The Siskin was tolerably common throughout the winter, especially on the Spanish side; and by the 2nd of April numbers were passing northwards.

56. SERINUS HORTULANUS, Koch.

I was rather surprised to hear the familiar note of the Serin Finch on the trees just outside Argelès on the 18th of March; but the position of that place is a very sheltered one. I saw the birds daily, and with the aid of a binocular there could be no mistake in the identification of the species.

57. LIGURINUS CHLORIS (Linn.).

The Greenfinch is common and resident.

58. PASSER DOMESTICUS (Linn.).

59. PASSER MONTANUS (Linn.).

The House-Sparrow is pretty generally distributed in the neighbourhood of towns and villages. The Tree-Sparrow, although more local, is also common, and during the winter and early spring a good many were to be observed in the trees and small gardens of St. Jean-de-Luz. I have seen them obtaining food from the droppings in the streets, just like the House-Sparrow.

60. Montifringilla nivalis (Linn.).

The Snow-Finch seldom comes down into the valleys. I saw it below the Somport (5000 feet) on a splendid day at the end of February, when its appearance there was considered to betoken a spell of bad weather, and two days later the higher villages were snowed-up.

61. Fringilla cælebs, Linn.

62. Fringilla montifringilla, Linn.

The Chaffinch is common and resident.

The Brambling occurs in winter and on migration, commencing its passage northwards as early as February; but Philippe notes that a few are found in summer, so that it probably breeds sparingly in the higher forests.

63. Linota cannabina (Linn.).

64. Linota rufescens (Vieill.).

65. Linota flavirostris (Linn.).

The Linnet is tolerably common in winter, and partially resident. I have seen the Lesser Redpole and the Twite, freshly captured, in the cages of the Basque bird-catchers in March.

66. Pyrrhula europæa, Vieill.

The Bullfinch is not uncommon in the Basque Provinces and in Navarre. I saw and obtained it several times in February and March.

67. Loxia curvirostra, Linn.

I observed the Crossbill in the elevated forests of Iraty in April, so that it was, no doubt, breeding.

68. Emberiza miliaria, Linn.

The Common Bunting was observed in the Lower Pyrenees in March.

69. Emberiza citrinella, Linn.

70. Emberiza cirlus, Linn.

The Yellow Bunting was noticed in the Basque Provinces throughout the winter, and was abundant in the Val d'Aspe in March, also in the Eastern Pyrenees in November. The Cirl Bunting was common about St. Jean-de-Luz from December to April, and during a snow-storm on the 10th of March there were numbers in a small garden in front of the Hôtel de la Poste at St. Jean-de-Luz, and even on the paved street with the Sparrows.

71. EMBERIZA HORTULANA, Linn.

The Ortolan Bunting was identified at Argelès on the 23rd of March, when, after unusually warm weather, a sudden change took place, followed by snow; and very surprised and miserable the poor migrants seemed to be.

72. EMBERIZA CIA, Linn.

The Meadow-Bunting is resident in the Lower Pyrenees, and appears to be the most abundant of the genus.

73. EMBERIZA SCHŒNICLUS, Linn.

The Reed-Bunting appeared in small flocks about St. Jean-de-Luz on the 7th of February, some of the males being in the fullest breeding-plumage at that date.

74. ALAUDA ARVENSIS, Linn.
75. ALAUDA ARBOREA, Linn.

The Sky-Lark was observed in the Basque Provinces throughout the winter, and immense flights were observed passing northwards in March. The Wood-Lark was much rarer during the same month.

76. ALAUDA CRISTATA, Linn.

A few Crested Larks were seen strutting about the roads and paths near St. Jean-de-Luz from the 6th of February onwards, but this species did not appear to be numerous up to the time of my departure in April. In the Eastern Pyrenees it was common in November.

77. MELANOCORYPHA CALANDRA (Linn.).

The Calandra Lark began to make its appearance at St. Jean-de-Luz in small numbers by the end of March; in Navarre it was seen earlier and was more abundant.

78. STURNUS VULGARIS, Linn.

The Starling was a common species.

79. PYRRHOCORAX GRACULUS (Linn.).

80. PYRRHOCORAX ALPINUS, Koch.

The Red-billed Chough was abundant on La Rhune towards Sare and in some parts of Navarre. In many parts of the Higher Pyrenees this species is very numerous; there are colonies just above Pierrefitte, and close to St. Sauveur. The Alpine Chough I never saw in the Basque Provinces, but in the Val d'Aspe and eastward it is very common. As a rule it inhabits higher ground than the Red-billed Chough, but by no means invariably, for both species frequent the wild gorges of Corsavi, under Canigou, in the Eastern Pyrenees.

The Nutcracker is undoubtedly found in the Pyrenees, but I have no personal acquaintance with it.

81. GARRULUS GLANDARIUS (Linn.).

The Jay is very common and resident in the wooded districts.

82. PICA RUSTICA (Scop.).

The Magpie swarms on the French side of the mountains, but on the Spanish side, even where the country appears equally suited to its habits, it is, I am happy to say, of rare occurrence. In some places along the Adour the nests are so close together that an uncritical traveller by rail or road might easily be deceived into the belief that he was looking at a somewhat straggling rookery.

In the Bayonne Museum there is a specimen of the Spanish Blue-winged Magpie (*Cyanopica cooki*), said to have been shot within the French boundary; but M. Hiriart, the curator, shakes his head over it; and certainly the average range of this bird does not extend north of the Ebro valley.

The Jackdaw was not observed by me anywhere; I heard what I took to be its note more than once, but the birds were flying high, and were possibly Choughs.

83. Corvus corone, Linn.

84. Corvus cornix, Linn.

The Carrion-Crow was abundant in the Lower Pyrenees, and in the Val d'Aspe I saw it in considerable flocks. The Hooded Crow was tolerably common about St. Jean-de-Luz in winter; one individual was nearly black, with a dark-grey collar; another, on the same tree, was a very light example. I also saw the species in Navarre.

85. Corvus frugilegus, Linn.

The Rook was plentiful in winter on the French side. In Navarre, where comparatively little rain had fallen for fifteen months, the soil was too hard for it in the spring of 1882.

86. Corvus corax, Linn.

The Raven is generally distributed, and its hoarse guttural bark was a familiar sound on my excursions. One morning a man was engaged just outside St. Jean-de-Luz in burying a horse which had died in the night, and a pair of Ravens were circling round, expressing their sentiments in the plainest manner upon such a waste of good food.

87. Dendrocopus major, Linn.

The Great Spotted Woodpecker was twice observed in the Basque Provinces.

The Black Woodpecker (*Picus martius*) undoubtedly inhabits the Pyrenees and the Cantabrian range, but I had not the good fortune to meet with it.

88. Gecinus viridis (Linn.).

The Green Woodpecker is common; nowhere more so than at Pau.

89. Iÿnx torquilla, Linn.

The Wryneck was very noisy on the 26th of March in the chestnut-woods outside Argelès.

90. Alcedo ispida, Linn.

The Kingfisher was frequently seen along the rivers and mountain-streams.

91. Upupa epops, Linn.

The first Hoopoe of the year was observed walking along the road near the Bidassoa on the 23rd of March, and several were seen later.

92. Cuculus canorus, Linn.

The Cuckoo was first heard at St. Jean-de-Luz on the 15th of April, and later it was both seen and heard.

93. Asio accipitrinus (Pall.).

I saw a freshly killed specimen of the Short-eared Owl at Bagnères-de-Bigorre on the 27th of March, 1882. The Long-eared Owl (*Asio otus*) also occurs, but I did not happen to see it; Companyó says it is excellent eating.

94. Syrnium aluco (Linn.).

I heard the Tawny Owl hooting loudly near Roncesvalles in Navarre.

95. Scops giu (Scop.).

The Scops Owl was not noticed in the Western Pyrenees during my spring visits; but at the foot of the Eastern Pyrenees, where the olive tree is abundant, it appears to be resident—at least it was there in November 1876. Lacroix says that it lays its eggs in old nests of the Magpie.

96. Bubo ignavus, Forst.

The Eagle Owl is of general distribution. I was shown the place where a pair bred every year in a narrow gorge just above the Hôtel Poujade at Amélie-les-Bains. This bird begins to nest very early, and Companyó says that he has found the young nearly full-fledged in March; he adds that the flesh of this bird is white, tender, and well flavoured. It is always difficult to induce peasants to show you the nest, as it is generally on an easily accessible ledge which they visit daily for the sake of the rabbits, hares, and partridges brought there by the old birds. I once lunched off a rabbit which I took from the Eagle-Owl's table.

97. Athene noctua (Retz.).

The Little Owl is tolerably common and resident; I heard its note several times near St. Jean-de-Luz in March.

Tengmalm's Owl (*Nyctala tengmalmi*) undoubtedly occurs in the upper fir-woods; and there is a specimen of the Pygmy Owl (*Glaucidium passerinum*) in the Museum at Perpignan, said to have been obtained in the Eastern Pyrenees.

98. Strix flammea, Linn.

The Barn-Owl is of general distribution.

99. Gyps fulvus (Gmel.).

The Griffon Vulture is common in the Western Pyrenees, especially on the Spanish side. I believe that about half a dozen pairs nest just within the French frontier, in the cliffs of La Rhune on the side looking to Spain; and there is a larger colony in the Hucel-haya or Trois Couronnes, a very conspicuous mountain on the Spanish side of the Bidassoa. With the above exception I am not aware of any breeding-place on the French side in the Western or Central Pyrenees; in fact the rocks do not appear suitable—with the exception, perhaps, of those above Les Aldudes near the Val de Bastan, where the frontier-ridge runs north and south instead of east and west. I saw over seventy Griffons at once over that village; and near Mendive I watched these birds with a binocular on some mountain-pastures from which we were separated by a deep gorge. On alighting, the Griffons might be seen stalking leisurely among the sheep, or perched upon a rock, taking a great interest, for obvious reasons, in the ewes which were lambing. On the Spanish side its breeding-places are numerous. Lacroix says that the eggs are laid towards the end of February; but we found none by the 8th of March, even in the mild climate of the Western Pyrenees. Philippe, who seems to have experimented on every thing, says "on le mange à l'étouffé, après l'avoir fait mariner cinq à six jours, pour lui faire perdre son odeur musquée."

100. Vultur monachus, Linn.

The Cinereous Vulture is certainly of rare occurrence in the Western Pyrenees, but in the Central and Eastern districts it sometimes comes over from the Spanish side, where it is abundant. Philippe says that it nests in the rocks of the Clot de Mountarioux, and Lacroix asserts that it does so towards the end of January—statements wholly at variance with what we know of its habits in Spain, where it makes its nests in tall trees and does not lay until March or April.

101. NEOPHRON PERCNOPTERUS (Linn.).

The Egyptian Vulture was observed on the Trois Couronnes on the 8th of March, in pairs, and the species is generally distributed throughout the Pyrenees from spring to autumn. As I did not see it in the Eastern Pyrenees by the end of October, it had probably left by that time.

It may prevent error if I state here that, in Provence, one of the local names for this Vulture is "Pélacan," which has (not unnaturally) been rendered into English as "Pelican" in Murray's 'Guide to France.'

102. GYPAETUS BARBATUS (Linn.).

The Bearded Vulture was observed by me on every excursion which I made in the mountains, from La Rhune to Navarre, and a pair of the birds is to be found in nearly every stack of rocks suitable for their nests. In the two stupendous pillars of limestone known as "Las Dos Hermanas" at Yrurzun they have bred from time immemorial, and, excepting by Loche, of Algerian renown, they have never been disturbed there. Going over the Pass of Lecumberri in Navarre, I watched a pair indulging in amorous play in the air on the 24th of February, and I am somewhat sceptical as to the statements of several French writers as to its breeding in January in the Pyrenees. That it does so in the south of Spain I am well aware, eggs taken at Loja on the 2nd of February having proved to be incubated. In the Eastern Pyrenees the Bearded Vulture has become very rare of late years.

103. CIRCUS ÆRUGINOSUS (Linn.).

The Marsh-Harrier was observed on all the open valleys of the lower districts of the Pyrenees.

104. CIRCUS CYANEUS (Linn.).

The Hen-Harrier was frequently seen quartering the ground by the rivers and on the sides of the mountains up to

3000 feet, from the 8th of March onwards. Montagu's Harrier (*C. cineraceus*) is in every Museum, but I did not meet with it alive.

105. Buteo vulgaris, Leach.

The Common Buzzard appears to be resident everywhere up to an elevation of about 4000 feet.

At St. Jean-de-Luz I saw a bird come across from Spain, alighting as if wearied, which I believe to have been a Rough-legged Buzzard (*Buteo lagopus*); but although I followed it up for some time, it would not allow me to get within shot.

106. Aquila pennata (Gmel.).

I saw the Booted Eagle and heard its familiar scream several times in the woods on the Spanish side near Roncesvalles in February, and again in April; and it nests in the forests on both sides of the Pyrenees. Its breeding-range is now well known to extend as far north as Brittany; but it will be a surprise to many, as it was to me, to learn that young birds taken from the nest in Normandy are in the Museum at Elbœuf.

107. Aquila clanga, Pall.

The Spotted Eagle is tolerably common throughout the wooded mountains; in Navarre I had several opportunities of observing it, but as I did not carry a gun in Spain, I could not obtain specimens.

108. Aquila adalberti, L. Brehm.

The young of the Spanish Imperial Eagle occasionally crosses the Pyrenees into France. I have examined one of these, shot by Philippe himself near Bagnères-de-Bigorre, now in the collection of the Rev. W. Lawson, of Lynton; and there is another in the Museum at Nîmes obtained by Crespon.

109. Aquila chrysaetus (Linn.).

The Golden Eagle is very rare on the French side (there is, in fact, next to no game for it to subsist upon); and in the Eastern Pyrenees, where the inhabitants are far more enter-prising than elsewhere, this bird is destroyed as much as possible for the sake of the reward—the bird being disembowelled, rudely stuffed, and hawked about from farm to farm. I saw this being done near Vernet. On the Spanish side, where there is plenty of ground-game, it is not uncommon.

110. HALIAETUS ALBICILLA (Linn.).

Immature Sea-Eagles were several times observed over the bay of St. Jean-de-Luz. At San Sebastian one was circling round the citadel on Monte Orgullo, evidently fearless of molestation, and on the look out for scraps and offal from the garrison.

111. CIRCAETUS GALLICUS (Gmel.).

The Short-toed Eagle was recognized on several occasions in the lower woods on both sides of the frontier.

112. NISAETUS FASCIATUS (Vieill.).

The long-legged Bonelli's Eagle was only identified on two occasions near St. Jean-de-Luz. In the Eastern Pyrenees, at the foot of which there is a long line of *étangs* frequented by water-fowl, it is not uncommon; and I saw three clutches of eggs still unblown, taken not far across the frontier, in Catalonia.

113. ACCIPITER NISUS (Linn.).

The Sparrow-Hawk is common and resident.

114. MILVUS ICTINUS, Savigny.

The Red Kite is the most conspicuous bird of prey about St. Jean-de-Luz, and is of general distribution.

115. MILVUS MIGRANS (Bodd.).

The Black Kite was noticed on the 15th of March, after which it might be seen at any time circling over the streets of Bayonne, and swooping down upon the floating garbage on the Nive and the Adour. It remains till October.

116. PERNIS APIVORUS (Linn.).

The Honey-Buzzard is abundant on migration, the spring passage being between the 10th and 15th of May; I have recently seen eggs taken in the forests on the French side.

117. Falco candicans, Gmel.

Two examples of the Greenland Falcon have been obtained near St. Jean-de-Luz; and Philippe records the occurrence of two birds on the 22nd of September, 1832, and one on the 25th of October, 1836, which were either this species or the Iceland Falcon.

118. Falco peregrinus, Tunstall.

The Peregrine Falcon was seen on several occasions. On the 10th of March, 1882, one was very noisy at its nesting-place on La Rhune, but no eggs had then been laid.

119. Falco æsalon, Tunstall.

The Merlin was observed on several occasions during the winter and spring.

120. Falco tinnunculus, Linn.

The Kestrel is common and generally distributed.

Philippe says that the Lesser Kestrel (*F. cenchris*) nests annually in the ruins of the Château of Mauvezin, near l'Escaladieu; but it would be interesting to have this confirmed by any ornithologist who happens to be at Bagnères-de-Bigorre in the latter part of May.

121. Pandion haliaetus (Linn.).

I observed the Osprey fishing in the Bay of St. Jean-de-Luz on two occasions.

122. Phalacrocorax carbo (Linn.).

This species is common along the coast, at least as far as Biarritz, where there is said to be only *one* historical example, known to visitors as *the* Cormorant.

123. Sula bassana (Linn.).

The Gannet was frequently observed over the Bay in winter.

124. Ciconia alba, Bechst.

Two Storks were observed passing over St. Jean-de-Luz northwards on the 6th of March. I have seen this species near the city of Leon in Spain, nearly a week earlier, although the weather was very cold at that time, and the passes into the Asturias were completely blocked by snow.

125. Anas boscas, Linn.

126. Querquedula crecca (Linn.).

127. Mareca penelope (Linn.).

128. Spatula clypeata (Linn.).

The Wild Duck, Teal, Wigeon, and Shoveller were the only species of Duck identified; but I saw some birds, which from their light appearance were probably Garganey Teal, on the Lac de Lourdes.

129. Mergus serrator, Linn.

The Red-breasted Merganser was seen and shot in the Bay of St. Jean-de-Luz in the winter.

Many other species of water-fowl frequented the mouth of the Bidassoa, but their wildness, owing to constant persecution, rendered their pursuit unprofitable.

130. Columba palumbus, Linn.

The Ring-Dove began to appear on migration on the 1st of February, 1883, in small numbers, and on the 12th there was a large passage, followed by many others. In August and September large numbers are taken in nets stretched across well-known passes in the mountains, the nearest to St. Jean-de-Luz being between Sare and Echalar. These places are called "pantières" or "palombières," and there are nearly a dozen of them between Sare and Luchon. On the spring migration the nets are not worked.

131. Columba œnas, Linn.

The Stock-Dove occurred on passage from the 14th of March onwards, but in small numbers.

132. Syrrhaptes paradoxus (Pall.).

I have had the pleasure of discovering three examples of Pallas's Sand-Grouse in the Pyrenees. The earliest, disguised under the name of *Pterocles arenarius*, is in the Museum of Perpignan, and was obtained on the 18th of October, 1859; the second, killed by Philippe near the Spanish frontier above Bigorre on the 27th of May, 1863, is in the College at Oloron; the third is in the Museum at Bayonne, and was obtained on the 23rd of June, 1863.

133. Caccabis rufa (Linn.).

The Red-legged Partridge is now very rare on the French side near St. Jean-de-Luz, and in the Eastern Pyrenees I have seen but few.

134. Perdix cinerea, Lath.

Our Grey Partridge is a very local species, frequenting the cultivated upland patches, and rarely moving far from the spot. When brought in for sale, three of them may generally be obtained for the price of a brace of Red-legs.

The Quail (*Coturnix communis*) is abundant on passage; but I was not there during the time.

135. Lagopus mutus, Leach.

The Ptarmigan is by no means uncommon near the snow-line. The most western locality, so far as I know, is about the Pic d'Anie or Pic des Escaliers, in the higher part of the Department of the Basses-Pyrénées.

136. Bonasa betulina (Scop.).

A Hazel-Grouse got up close to me in the woods of Roncesvalles. This species is now becoming scarce on the French side; and I was unable to obtain any trustworthy information about it in Navarre or in Catalonia. Companyó asserts that it is plentiful as far south as the province of Valladolid in Spain.

137. Tetrao urogallus, Linn.

The Capercaillie occurs in the forests of the entire range, but on the French side its numbers are rapidly decreasing; I have only seen it near Luchon.

The Black Grouse (*Tetrao tetrix*) is said by Companyó to be tolerably abundant in the moderately elevated portions of the Eastern Pyrenees, where it is known to the Catalans by the name of "Cua furxude" or forked-tail. This species is certainly unknown in the western part of the Pyrenees as far as Luchon; but considering the break of continuity in that range to the east of the Port de Venasque, and the connexion of the eastern portion with the Cevennes, it appears not improbable that Companyó's statement is correct, in spite of the fact that Lacroix says nothing about this Grouse.

138. Rallus aquaticus, Linn.

139. Porzana maruetta (Leach).

Both the Water-Rail and Spotted Crake were common and resident in suitable localities near St. Jean-de-Luz, where I shot several.

140. Crex pratensis, Bechst.

The Land-Rail was obtained at St. Jean-de-Luz as early as the beginning of March.

141. Gallinula chloropus (Linn.).

The Moorhen is tolerably common and resident in the low grounds.

The Coot (*Fulica atra*) is abundant on the *étangs* at the foot of the Eastern Pyrenees; but that district does not come within the limits of the present paper.

142. Grus communis, Bechst.

The Cranes passed northwards towards the end of February; on the 10th of March, 1882, Mr. Seebohm and I witnessed the passage of a Merlin, a Peregrine, eight Kites, and a Crane crossing the shoulder of La Rhune simultaneously; the latter was going full speed in a north-easterly direction.

143. Otis tarda, Linn.

144. Otis tetrax, Linn.

The Great Bustard is not uncommon on passage in the Lower Pyrenees, and I believe it still breeds in the Landes to the north of Bayonne; there are six specimens in the Museum. The Little Bustard is a regular migrant on its way to and from La Vendée, where it breeds in considerable numbers.

145. Œdicnemus scolopax (Gmel.).

The Stone-Curlew, known in the Lower Pyrenees by the misleading name of *Poule de Carthage*, was fairly common about St. Jean-de-Luz in winter.

146. Charadrius pluvialis, Linn.

A few Golden Plover came into the market at St. Jean-de-Luz in the winter, and a tolerable number passed over, but they were very wild.

147. ÆGIALITIS HIATICULA (Linn.).

148. ÆGIALITIS CANTIANA (Lath.).

Numbers of Ringed Plover were observed on the mud-flats of the Nivelle and on the sea-shore in March; and on the 26th of that month I identified a single Kentish Plover feeding, with four of the preceding species and three Dunlins, and very unsuspicious.

149. VANELLUS VULGARIS, Bechst.

The Lapwing was common in December near St. Jean-de-Luz, but afterwards disappeared, returning about the 20th of February.

150. HÆMATOPUS OSTRALEGUS, Linn.

An Oyster-catcher was shot out of a flight on the 10th of December, and on the sand-banks at the mouth of the Bidassoa it was not uncommon.

151. PHALAROPUS FULICARIUS, Linn.

On the 23rd of December, a very wet and squally day, I watched five Grey Phalaropes flitting up and down the last line of breakers, and occasionally resting on the water close to the shore at St. Jean-de-Luz. They were very tame, until driven away with stones by some boys.

152. SCOLOPAX RUSTICULA, Linn.

The Woodcock is fairly abundant about St. Jean-de-Luz in winter and on passage. During the severe weather between the 6th and 13th of March, 1883, many were brought into the market of St. Jean-de-Luz, and the price fell to 5 francs the couple. I saw one as late as the 30th of March.

153. GALLINAGO MAJOR (Gmel.).

154. GALLINAGO CŒLESTIS (Frenzel).

155. GALLINAGO GALLINULA (Linn.).

I have seen one freshly killed Double Snipe shot by the Nivelle. In winter both the Common and Jack Snipe were obtained, but they were not abundant.

156. TRINGA ALPINA, Linn.

Three Dunlins, two of them in breeding-plumage, were seen on the Bay of St. Jean-de-Luz on the 26th of March.

157. Machetes pugnax (Linn.).

A Ruff was hanging up in the market at Pau on the 16th of March.

158. Totanus hypoleucus (Linn.).

The Common Sandpiper was observed on several occasions on the mountain-streams. Both the Wood- and the Green Sandpiper occur on passage, but Lacroix's statement that the latter breeds in the Pyrenees is probably incorrect; I have seen the eggs which he ascribes to this species, and they are those of the Common Sandpiper.

159. Totanus calidris (Linn.).

160. Totanus fuscus (Linn.).

The Common Redshank was obtained at St. Jean-de-Luz on the 14th of March; and on the 16th of April a Spotted Redshank in its black breeding-plumage was seen, but unfortunately was not shot.

161. Limosa ægocephala (Linn.).

A good many Black-tailed Godwits were obtained on passage on the 3rd of March.

162. Numenius arquata (Linn.).

The Curlew is tolerably common in the lower districts in winter, and has been known to breed near Capvern, where, according to Philippe, a female was taken with two eggs (which he describes accurately), on the 10th of May, 1838.

163. Larus ridibundus, Linn.

164. Larus melanocephalus, Natt.

Our Brown-headed Gull was common on the Nivelle and in the Bay of St. Jean-de-Luz during the winter and up to the beginning of March 1882. Then, first a few and afterwards about a score of the Adriatic Black-headed Gulls made their appearance on the bay, and by the 6th of March they had completely replaced the former species. They frequented the mouth of the harbour, close by the custom-house, where it was impossible to shoot them, although I wanted a specimen badly for the purpose of convincing a sceptic; but nothing could be easier than their identification, the pure white primaries of the adults being very apparent as they soared over one's head. Some of the mature birds had nearly full black heads by the 7th of March, when I left for that year. During the winter of 1882–83 I saw none; but I believe this species breeds on some of the lakes, of which there is a chain lying parallel to the sea, between Bayonne and the mouth of the Gironde, and it is known to be a visitor to Bordeaux.

165. LARUS MINUTUS, Pall.

On the 7th of March, 1882, I watched a flock of Little Gulls, numbering from forty-eight to fifty, in the Bay of St. Jean-de-Luz; about thirty-six of them had already full black heads.

166. LARUS CACHINNANS, Pall.

The Yellow-legged Herring-Gull was the only member of the grey-mantled group identified at St. Jean-de-Luz. An adult male which I shot on the 12th of January had bright lemon-coloured legs and feet; there were no grey mottlings about the head and neck, but only a few dark hair-streaks in front of the eye.

167. LARUS MARINUS, Linn.

168. LARUS FUSCUS.

The Great Black-backed Gull was frequently observed on the coast. On the 1st of March I watched a long flight of at least 200 going steadily out to sea, S.W. direction. The Lesser Black-backed Gull was also identified.

The Glaucous Gull (*Larus glaucus*) has been shot near Hendaye.

169. RISSA TRIDACTYLA (Linn.).

The Kittiwake occasionally came into the bay in severe weather.

170. STERCORARIUS CATARRHACTES (Linn.).

A Great Skua shot at l'Anglet last autumn is in the Bayonne Museum.

171. STERCORARIUS POMATORHINUS (Temm.).

172. STERCORARIUS CREPIDATUS, Gmel.

I picked up an example of the former at St. Jean-de-Luz after heavy weather, and examined a young Arctic Skua that had recently been shot at Hendaye.

173. Procellaria pelagica, Linn.

174. Cymochorea leucorrhoa, Vieill.

The Storm-Petrel was observed during the winter gales. I saw a Fork-tailed Petrel which had recently been obtained at St. Jean-de-Luz; and Philippe records two found dead on the 29th October, after heavy weather, far inland at Campan and Pierrefitte.

175. Puffinus kuhli (Boie).

It is the Mediterranean Shearwater, and not *P. major* of the North Atlantic, which has been obtained on the coast between St. Jean-de-Luz and Bayonne.

176. Alca torda, Linn.

177. Uria troile (Linn.).

Both the Razorbill and Guillemot were common in the bay in January.

178. Colymbus septentrionalis, Linn.

The Red-throated Diver was identified in the bay, and I believe I saw some individuals of the larger species.

This is a poor list compared with that of M. Lacroix, which contains nearly 350 species; but if his example were followed, and the birds of the coast of the Mediterranean as far as Marseilles, with all the Warblers and Waders of the Camargue, were included, it would be easy to add another fifty "on my personal knowledge." But the latter would scarcely be Birds of the Pyrenees, and I have already strained a point in regard to the species found on the west coast.

XL.—*Notes on the Eighth Volume of the 'Catalogue of Birds in the British Museum.'* By H. B. Tristram, D.D., F.R.S.

No work more complete and comprehensive in its design than the British Museum Catalogue has ever appeared on ornithology. It would be unreasonable to expect that the volumes of a series so wide-reaching and extensive, and necessarily the work of various authors, should be exactly equal in exhaustiveness or accuracy, still less that in the present state of our knowledge, all should be in accord as to the delimitation of the various groups, whether of families or genera. On this point the writers of the *later* volumes on the *Passeriformes* are undoubtedly at a disadvantage. Their predecessors could pick and choose, and eliminate from their scheme every anomalous form, relegating it, if not too late, to the Timelines or elsewhere. The writer of an early volume might lay down his diagnosis of family, subfamily, or genus, and gracefully return into Dr. Günther's hands every proffered species which does not shape its first primary, its culmen, or the scales of its tarsi according to the statute in that case made and provided. But a day of retribution comes. The waste-paper basket must be cleared. The unfortunate exiles, who have been passed, like vagrants under the old poor-law, from parish to parish, must find a home somewhere; and the task of finding it falls to the compiler of some later volumes, where *Tatare, Xenicus, Clytorhynchus, Acanthisitta, Ruticilla moussieri,* and many another friendless stranger must have a somewhat general refuge afforded to them. Nor can we expect the various authors to have identical views on the specific value of many forms. Yet we may reasonably presume that the system of subdivision shall be guided by the same general principles. A careful examination of vol. viii. compels us to the conclusion that Dr. Gadow, in compiling his portion of the Catalogue, has too often disregarded any idea of conforming to a general principle. He has, to take the case of the Paridæ, exercised his right of private judgment to a very liberal extent. But our complaint is, that he has not done this on any uniform or consistent principle. We are bewildered by the inclusion or exclusion of subspecies or races, but no information is given as to why one form has specific rank, another subspecific, and a third is classed as a race. We ask in vain why *Parus leucopterus* is a race of *P. niger,* while *P. persicus* is a subspecies of *P. cæruleus*. To an ordinary observer the differences of the former are more marked than those of the latter. Again, *P. haplonotus* is made a subspecies of *P. xanthogenys*, which is sometimes carelessly spoken of as *P. jerdoni*; while *P. beavani*, which, from the diagnosis given, as well as in actual fact, is more decidedly differentiated from *P. rufonuchalis* than is *P. haplonotus* from its conspecific form, is put down as a race, whereas *P. castaneiventris* is unhesitatingly put down as a species. Sometimes colour is ignored, sometimes size, as constituting specific value; but it is all haphazard. To take the instance of the American *P. atricapillus*:—under this form *P. occidentalis* is ignored. We are told it is a somewhat differently coloured race, but are not informed what are the differences of colour. *P. septentrionalis* is also ignored, though we are told the differences, both in size and colour; while to *P. carolinensis* is granted subspecific rank. Writing with specimens of all these races before us, we are sorry to say we cannot discover the justification for this varied mode of treatment. Certainly the claims of *P. septentrionalis* seem as great as those of *P. carolinensis*. But it is needless to multiply instances. The objection is not to the use of the terms "race" and "subspecies," but only to their capricious application.

In the formation of a key to the species, valuable as such a key is as an index to the holder of an unnamed specimen, it is also important that, if possible, it should be so arranged that the various species, when classified in accordance with it, shall show some sort of natural order, and that closely allied species shall not be widely separated by the intrusion of a totally different group between them. In this respect the admirable synopsis of Baron de Selys-Longchamps seems to commend itself at once by its simplicity and truthfulness. That accomplished naturalist has happily seized on the salient characters and arranged them in such a manner that every bird, with its subspecies and races, seems to fall into its place in natural order. We venture to reproduce it in translation (Bull. Soc. Zool. France, 1884, p. 76).

PARUS.

- Body dark. No sharp pattern in the plumage. No crest . . . . . MELANIPARUS. Type *niger*.
- Underside light-coloured. Pattern sharply defined.
  - No nuchal spot nor abdominal black line.
    - Crested . . . . .
      - No neck-collar . . . . . BÆLOPHUS. Type *tricolor*.
      - Black neck-collar . . . . LOPHOPHANES. Type *cristatus*.
    - No crest. Black or brown cap . . . . . PŒCILE. Type *palustris*.
  - With a nuchal spot . .
    - No abdominal black line. Black cap and throat.
      - White forehead. No crest . . . . . SITTIPARUS. Type *varius*.
      - Black forehead; crested or not . . . . PERIPARUS. Type *ater*.
    - Black abdominal line . . . .
      - Cap and throat black.
        - No crest and no light eyebrow . . PARUS. Type *major*.
        - Crested and with a light eyebrow . . MACHLOLOPHUS. Type *xanthogenys*.
      - Blue or white cap. White forehead . . . . . CYANISTES. Type *cæruleus*.

While adopting this classification and key, we must not be supposed to endorse all the Baron's views with respect to races, though happily he has too much respect for Linnæus to inundate us with subspecies; but we are hardly yet prepared to depose our old friend *P. teneriffæ* or our new acquaintance *P. flavipectus* from their specific position. Yet we are convinced that a more careful and complete review of the Parinæ has never yet appeared. But, in opposition to the views advocated by Baron de Selys-Longchamps, Dr. Gadow, and Mr. Seebohm alike, M. Menzbier has enunciated a totally new theory (Revue Scientifique, Paris, 1884, p. 515), holding:—not that the subspecies of Mr. Seebohm are races derived from a common type and modified by surrounding conditions, and that the intermediate examples of two found near the geographical limits of each are hybrids, but that, on the contrary, many of these are good aboriginal species, e. g. *P. flavipectus* and *P. pleskii*, and that *P. cyanus* and *P. cæruleus* are Tits of the Anglo-Saxon type, busied in the absorption of the local species, and destined ultimately to exterminate all traces of their rivals. The theory is original; but we think that naturalists will hardly yet be prepared to accept it, nor do we perceive its basis of facts, so far as yet set forth.

Passing from the Paridæ to the Laniidæ, it is in the latter that we find the errors of this volume most apparent. It is not, however, Dr. Gadow's fault, but that of his predecessors, that he has been compelled to dislocate *Gymnorhina* from *Strepera*. But we cannot pass over without a protest the inclusion of *Clytorhynchus* under *Xenopirostris*. To say nothing of the one being a well-marked Madagascar genus, and the other a native of New Caledonia, we find that though the wing-formula is similar, yet in other points they differ widely. The bill of the New Caledonian is not nearly so elevated or convex as in *Xenopirostris*; while the rictal bristles, feeble and scarcely to be detected in the latter, are very strong and powerful in the former. I say nothing of the brilliant plumage of all the Madagascar birds and of the sombre uniform drab of the New Caledonian. Dr. Gadow seems to have had before him only a solitary example of the genus from Madagascar; but he had a pair of the New Caledonian species. His description is unintelligible, unless "outer," in line 6, be a slip of the pen for "inner;" and speaking from a careful examination of eight specimens now before me, I can say that it would be scarcely possible for the whitish terminal tip on the outer central pair of tail-feathers to wear off until the tail was worn to a stump. There is no authority for Dr. Gadow's statement that this bird is a native of the New Hebrides. The fact is that it is a typical *Myiolestes,* a peculiar Pacific-Ocean family, from which there is no pretext for dissociating it; it is intermediate between *M. vitiensis* and *M. maxima,* while *M. nigrogularis* from Fiji makes a far nearer approach to *Xenopirostris.*

But it is to the classification of the Pachycephalinæ that we take most exception. We have certainly not to complain here of races and subspecies, but of wholesale "lumping" without any reason assigned, in defiance both of literature and of specimens, even when the latter are in the British Museum. There is no class of birds in which the variations in colour are more interesting or important—not only every Pacific group, but in many cases each island of a group having its own localized form. Be they species or not, they are recognizable, and the catalogue which does not notice these modifications with a reference to their bearing on geographical distribution is valueless.

Under the first species given, *Pachycephala melanura,* we find included *P. macrorhyncha* and *P. clio.* We should hesitate to reject Salvadori's very clear diagnosis of *P. macrorhyncha* because sometimes a few black feathers may occur on the side of the neck. There may certainly be a tendency to inosculate in all these closely allied forms. The Sula and Bouru form, *P. clio* of Wallace, is rejected because "the colour of the upper tail-coverts is of no specific importance." But Wallace gives other distinctive characters, size and broader pectoral band, which hold good in our specimens; besides which we find the black of the tail more intense, and the rectrices edged with deep yellow instead of silver grey. We presume that the writer must have examined these birds by gas- or candle-light.

We observe throughout the volume that every species described by Mr. E. P. Ramsay is invariably accepted without hesitation or question, and consequently the one subspecies admitted in this genus is *P. kandavensis,* the description being copied, but no specimen examined; for the three specimens in the British Museum from Kandavu, Dr. Gadow very rightly relegates to *P. vitiensis.* It seems impossible, from the description, to distinguish the two. But unfortunately Mr. Layard's observations have been quite overlooked; they point out that *P. vitiensis* is the special form of Kandavu, and it is scarcely probable that a second very closely allied, if not indistinguishable, race should occur in the same very small island. Next, in describing *P. gutturalis,* the author says, "I have copied Ramsay's description of *P. occidentalis,* although the specimens from Western Australia in the Museum do not agree with his diagnosis"! We can only add, neither do our own three from Western Australia. Yet the next species is *P. occidentalis,* without a specimen to justify it. On *P. littayei,* adult female, is the remark, "Canon Tristram says 'the female is little less brilliant in colour than her mate.'" Then the writer proceeds to state, as if in contradiction to this statement, the differences, which are taken word for word from the description by Tristram. This seems scarcely a fair way of treating a describer. But *P. astrolabi* is perhaps one of the least excusable of all the mistakes of the volume. Having assumed that *P. christophori* is identical with *P. astrolabi,* Dr. Gadow proceeds, "The diagnosis given by Tristram for his *P. christophori* (♂) agrees with an immature male of *P. astrolabi.*" But just above he has described the young male, stating it is one of the types of *P. christophori.* We have seldom met with a more amusing instance of begging the question. The very measurements given might have created some suspicion; they are 7·7, 0·9, 4·2, 3, and 1, as against 6, 0·75, 3·4, 2·5, 1. More correctly the last three measurements should have been 3·1, 2·4, and 0·9. Not only is there this material difference in size, but the adult male of *P. christophori* has an olive-green, not a black head, has no vestige of a yellow collar behind, has tail olive-green instead of black, and has the black collar in front double the depth of that of *P. astrolabi*. In fact there are no two birds of the yellow-throated group more widely separated: one is the largest and the other the smallest of the group. Of both we possess adult and young of both sexes. With the next species, *P. torquata,* is united *P. intermedia,* Layard. The references are given to Mr. Layard's very careful observations on the spot, from the P. Z. S. and 'Ibis,' but his remarks are totally ignored. He has pointed out that *P. torquata* is confined to Taviuni, while on Viti Levu is found *P. intermedia.* If Dr. Gadow has ever seen the two together it is difficult to conceive how he could have confounded them. The one has a black gorget, the other a faint black line; the one has the throat and all the lower plumage rich orange, the other has the underside yellow; the back of the one is very dark olive, the other very pale olive-green. *P. torquata* has no loral yellow spot, *P. intermedia* has. The description of the female of *P. torquata* is scarcely recognizable from the type, while the female of *P. intermedia* is totally different, being brown and mottled grey instead of chocolate. But it is unfortunately evident that while Mr. Layard's papers have been referred to, they have not been read.

A similar ignoring of authorities meets us in the next species of the Catalogue, *P. graeffei,* to which is united the distinct species *P. neglecta.* Not a word of explanation is given, and yet the descriptions and notes of Layard are referred to as though they had been examined. *P. graeffei* is confined to Vanua Levu, *P. neglecta* to Ovalau. The underside of the former is deep orange, with yellow loral spots, of the latter rich brilliant yellow, with no loral spots. Even if these differences be not specific, subspecific, or racial, they ought at least to have been mentioned for the guidance of students. *P. jacquinoti* is next described merely as "very similar to *P. astrolabi,* Bp., but differing from that species in having the whole throat and fore neck deep shining black." There is no description given of the female, which is strikingly distinct from that of any other of the group.

We do not understand why *P. xanthetræa* is changed into *xantherythræa,* unless it be that the writer was not aware of the derivation, which is from *ἦτρον,* the belly, and has no connection with *ἐρυθρός,* as he seems to have supposed. It is also curious to have *P. grisola* described from an Andaman-Island specimen, and three Burmese specimens quoted, while the habitat is given as Java, Sumatra, N.W. Borneo.

On the genus *Lanius* there is much less room for criticism. We think we detect Mr. Seebohm's guiding hand, and we cannot complain of "lumping" here, excepting in one or two cases. The writer who could separate *L. fallax* and *L. elegans* ought to have been able to recognize *L. excubitoroides* from *L. ludovicianus.* The division into species seems carried to its utmost limits, when, *e. g.*, we find *L. mollis* granted full specific rank on the strength of tail-coverts "sandy buff" instead of "creamy greyish white"!! and the microscopic distinction between *L. homeyeri* and *L. leucopterus* admitted. It is also admitted that in Turkestan the two species (?) interbreed. But it is when we reach the six species *L. fallax, assimilis, hemileucurus, grimmi, dealbatus,* and *elegans* that the genius of splitting has reached its fullest development. On *L. elegans* we may observe that the only specimens, excepting the type, presented to the British Museum by the Hudson-Bay Company were all procured by ourselves. The type may be dismissed by common consent, since, not being *L. ludovicianus,* there must be some error in assigning it to the fur-countries. Our specimens, though attributed to Algeria and Tunis in the Catalogue, do not come from Cisatlantic Algeria or Tunis, but from the oases of the M'zab country in the Sahara. They were all shot by myself, except one by Mr. J. H. Gurney, Jun., during his visit to the M'zab in 1870. But in the same oases I shot, together with the previous specimens, several birds which are now decided to be *L. hemileucurus.* All my specimens of the latter are *female,* of the former *male,* and no other Shrike has been met with in the district. It is important to remember that no grey Shrike, except *L. algeriensis,* occurs north of the Atlas, so that the expressions Tunis, Algeria, may mislead. However, it is admitted that "every intermediate stage in coloration occurs between *L. hemileucurus* and *L. fallax* ;" which being admitted, and the geographical range being identical, the species we think may not unreasonably be called in question. *L. assimilis,* which seems to me only an eastern race of *L. hemileucurus,* is stated to have a most extraordinary habitat, viz., "Sennaar and the White Nile, ranging through Turkestan to the Amoor." The only authority for Sennaar and the White Nile is a solitary purchased *immature* skin in the British Museum without further history than "East Africa." We fear this is very slender evidence for so exceptional a career.

Again, on *L. fallax,* which has borne in turn no less than six aliases, from all of which it is now excluded, we find some remarks which may somewhat shake our confidence in the soundness of these diagnoses. *L. fallax* is stated to be a paler race of *L. algeriensis,* but differing in some minute particulars. But, on the other hand, we have a species, *L. uncinatus,* from Socotra, the distinguishing feature of which is its strong and hooked bill. We find that a Palestine bird has the bill just as much developed as the Socotran. From this is drawn the inference that the Palestine birds are intermediate between *L. fallax* and *L. uncinatus.* I do not for a moment question the fact, but I doubt if there be any ground for separation, specific, subspecific, or racial. I find my specimens from the same locality, obtained at the same time, are placed some in one category, some in another. Verily these definitions would have gladdened the heart of the elder Brehm! I observe that my male specimens are placed in one series and my female in another. The only conclusion we can arrive at here is that the species-making is a little overdone in the Laniinæ, to atone perhaps for the very different treatment meted out to the Pachycephalinæ.

When we come to the Ethiopian forms, we find *Lanius collaris* and *L. humeralis* treated as merely races, on the ground that in the debatable land of Natal the South-African and the

Abyssinian forms, in two or three specimens, appear to run into each other; *L. smithii*, a very marked form of *Lanius*, follows as a subspecies, while *L. fuscatus*, so closely allied to *L. schach*, enjoys full specific dignity. A like inconsistency is shown in the case of *L. cristatus* and *L. superciliosus*, the latter being simply a more brightly coloured form, with no specific distinction. As to its distribution, we are told that it winters in Java, Malacca, and the Philippines, and in spring migrates northwards through China, breeding in Japan, Mantchooria, and Mongolia south of Lake Baikal. I cannot discover the authority for these statements, which are directly contrary to the very exhaustive account of this Shrike by Lord Tweeddale (Ibis, 1867, pp. 218–220). The only specimens in the British Museum are from Malacca. A startling phenomenon in geographical distribution is presented in the case of *L. speculigerus*, which is stated to be found in Dauria, Turkestan, Afghanistan, and Abyssinia (!). The authority for this last locality seems to be a specimen from King M'tesa's country, which is not exactly Abyssinia, according to our ideas. But the explanation is, that the writer has confused the North-Asiatic bird with Hartlaub's *L. gubernator*, from Equatorial Africa, now before us, a perfectly distinct species, which is altogether ignored. The description of *L. speculigerus* is quoted from Finsch; but we have not been able to discover where he has described it. While on the subject of nomenclature, we may express surprise that Dr. Gadow has selected *tigrinus* as the name for *L. magnirostris*, having apparently overlooked the unanswerable article of Lord Tweeddale (Ibis, 1867, pp. 221 *et seq.*).

Turning to the Nuthatches, we may remark that *Sitta syriaca* is stated to occur in Palestine, while *S. neumayeri* is assigned to the north, the Balkans, Asia Minor, and North Persia. It is this latter alone which has been found in Palestine; but I have repeatedly shot both forms on the same rocks, and once by the same shot, in the Taurid. The difference between the two so-called species is merely size. After finding them recognized as distinct species, it is surprising to see *S. aculeata* merged under *S. carolinensis*; for the differences, if slight, are constant. But yet stranger is it to read that *S. villosa*, from China, is a subspecies, "scarcely specifically distinct from the widely ranging North-American *S. canadensis*." On the contrary, there are few Nuthatches more markedly distinct. The tail-feathers of the American bird are black, with a white subterminal bar and brown extremities. The Chinese has black rectrices with whity-brown extremities. The throat is ashen instead of white, there is no white nuchal collar, nor any black patch on the side of the neck; the black cap does not extend more than half as far; the back is a more ashen hue, and the whole underside russet-brown instead of rich fawn-colour.

Occasional misprints cannot be avoided by the most careful compiler; but there are, unfortunately, exceptionally numerous errors in this volume which cannot be attributed to the printer. Some of these are mere oversights, as when we are told four times over that the tarsus of *Parus lugubris* is over 2·7 in. But in the references to authorities they continually occur, to the great inconvenience of the student. Thus, p. 80, we find P. Z. S. 1863, pp. 336, 451, instead of 1863, p. 336, and 1870, p. 451; on p. 190 we find Ibis, 1879, p. 147, when it ought to be Ibis, 1877, p. 357. But it is needless to waste time on errata, as we trust a sheet of them will soon be published. Our complaint against the volume is that it gives no sign, except in such cases as the Grey Shrikes, of the care and labour which has been bestowed on the previous volumes. We do not wish to be captious or unreasonable critics; but ornithologists have a right to expect that the papers of the describers of species (especially when they have been field-naturalists working on the spot, and giving the life-habit of the bird, like Mr. E. L. Layard) should at least be looked at, and their specimens examined, instead of being passed over *sub silentio*. Ornithologists have also a right to expect that the compilers of the catalogues, while each is quite free to adopt his own views of classification and arrangements, should yet be, in some slight degree, consistent in their method, and—may we add?—that some one at least should verify the references.

XLI.—*Notes on the Birds of Chamba, in the N.W. Himalayas.* By Major C. H. T. Marshall.

(Plate X.)

Chamba is a native state, lying between 32°–40° N. lat. and 76°–78° E. long., bordered on the north and west by Kashmir and Ladakh, on the south and east by Kangra and the plains of the Punjab. It contains 3200 square miles of mountainous country. Of this large area only 100,000 acres are cultivated; the rest consists of snowy and rocky mountains, grassy hills, and vast forests of cedar, pine, oak, birch, &c. Through it run the rivers Ravi and Chenab and the three great ranges of mountains—the Western Himalayas, the Mid Himalayas, and the Outer Himalayas. The first borders the Chenab river and the Pangi valley, the snowy peaks averaging 20,770 feet and the passes 15,700 feet. The second cuts through the middle of the State and divides the Chenab from the Ravi; its snowy peaks average 19,000 feet and the passes 15,000. The third forms the boundary between Kangra and Chamba, averages about 13,000 feet, and is clear of snow in the summer.

The climate is, as might be supposed, very varied, from the suffocating heat in summer of the low closed-in valleys to the bracing cold of the glaciers among the eternal snows. The species included in the subjoined list form a very varied selection, comprising the Rose-Finch and Chough, dwellers among the highest passes, with the Ring-Dove and Grey Shrike of the plains.

I have been administering the State for the last four and a half years for the Raja, who is a minor. I have had many opportunities of observing the avifauna of the neighbourhood, though I must confess that I have not done so much as I might, and I fear my list is not very perfect as far as the birds of the higher regions are concerned.

The greater part of my observations were made within a radius of ten miles of the town of Chamba itself, where I spent the winter months. It is on a plateau overhanging the

Ravi at an elevation of 3300 feet. In January and February it is the resort of a great number of birds driven from the uplands by stress of weather. Thrushes, Finches, Warblers, and Bulbuls flock in hundreds in the gardens, and out in the fields may be found swarms of Snow-, Wood-, and Rock-Pigeons. Of the 265 species I have observed, one seems to be new, and there are several genera which have not yet been noticed so far north-west as this, such as *Tarsiger, Ixulus,* and others. Again, *Turdus ruficollis* and *Ruticilla erythrogastra* have never, I believe, been recorded as having occurred at so low an elevation as 3000 feet.

1. VULTUR MONACHUS. "Kála-gid."

I have frequently seen these huge Vultures floating up and down the valley in the winter and spring, never more than two at a time. Search has been made in vain for their breeding-haunts. The hill-men declare that it does breed on precipitous cliffs further inland than Chamba, but they have never succeeded in bringing me an egg. Mr. Hume says that an egg was extracted from the oviduct of a female between this and Murree; I have therefore still hopes of learning more about its nidification.

2. OTOGYPS CALVUS.

The King Vulture is an occasional visitor. He comes flying up the Ravi from the plains every now and again in search of food, but never seems to remain long or to go further inland. This species does not breed within Chamba limits.

3 *ter*. GYPS HIMALAYANUS. "Burra-gid."

The Himalayan Griffon is not common, but is to be found in suitable localities throughout the mountains of Chamba. I have seen them soaring over the snowy range towards the Pangi valley. They breed on lofty and generally inaccessible cliffs in January and February. The late Major Cock (the best birds'-nester in India) found their eggs near Dharmsala, which is on the borders of this State. As far as I can ascertain, they do not breed on the other side of the eternal snows.

5. Gyps bengalensis. "Gid."

Fairly common; breeds in the large peepul and mangoe trees at low elevations, where the outer range runs into the Sewaliks.

6. Neophron ginginianus. "Safayd-gid."

This ubiquitous Vulture includes Chamba in its hunting-grounds. During the summer I have seen it up as high as 7000 feet elevation. It breeds in the cliffs in the warm valleys.

7. Gypaetus barbatus. "Okháb."

Common all over the hills on this side of the snowy range. I have seen its eyries on precipitous cliffs, but have never taken the eggs. The natives give it the name applied to the Tawny Eagle in the plains.

13. Falco subbuteo.

17. Falco tinnunculus.

21. Astur palumbarius. "Jura," ♂; "Baz," ♀.

The Goshawk is found throughout Chamba in suitable localities. It breeds in forests at high elevations. It is much prized for hawking, and in the autumn nets are fixed, baited with live Pigeons, on the crests of the hills about which they resort, and several are captured yearly. A female Goshawk untrained fetches from 50 to 80 rupees, the male is less esteemed. They are used in Chamba for hawking Pheasants and Ducks.

23. Astur badius. "Nikka básа."

24. Accipiter nisus. "Básа."

This and the preceding are common. They are often caught and trained for hawking Quails and small birds.

26. Aquila chrysaetus. "Muriári."

The Golden Eagle seldom comes down into the valleys, but is frequently to be met with in the interior at high elevations, generally near the snowy ranges, over which it passes into Pangi. It a great enemy to the Monál and other Pheasants, so a reward is placed upon its head. More than twelve specimens have been brought to me within the last four years. One was secured alive, while fighting with another over the carcass of a lamb, by some hill-men who were watching their flocks. I kept it for some time, feeding it on Mynas, but one day it managed to make its escape.

27. AQUILA MOGILNIK.

Occurs sparingly.

32. NEOPUS MALACCENSIS.

33. NISAETUS BONELLII.

The nest of this Eagle was found on a ledge on a precipitous cliff over the river Ravi, quite inaccessible without scaling-ropes.

36. SPIZAETUS NIPALENSIS.

I have only seen one Hawk-Eagle, on a dead tree in the Kajiar forest. It is not known to the native shikaris.

39. SPILORNIS CHEELA.

The Serpent-Eagle breeds in Chamba. Capt. Cock found several nests near Dharmsala, which is on our border. I have never been successful in finding the egg myself.

45. BUTEO CANESCENS.

I believe that *Buteo plumipes* also occurs in these hills. I have seen birds that appeared to belong to this species, but failed to secure them; I do not therefore include it in my list.

56. MILVUS GOVINDA. "Eel."

56 *ter*. MILVUS AFFINIS. "Eel."

Both species are found within the Chamba limits.

63. SYRNIUM INDRANI.

66. SYRNIUM NIVICOLUM.

In higher ranges; several specimens brought in.

67. ASIO OTUS.

Two specimens shot in the winter near the town.

70. BUBO COROMANDUS. "Ooloo."

Owls are here, as in many other places, looked upon as birds of ill omen, the present species more especially so. It is shot wherever found, and the body thrown into the nearest river, so that the bad luck connected with them may be washed away.

74 *bis*. SCOPS SUNIA. "Dundul."

74 *ter*. SCOPS SPILOCEPHALUS.

75 *bis*. SCOPS PLUMIPES.

I have only distinguished three species of *Scops* in the forests at an elevation of from 6000 to 7000 feet. Their calls are very distinct; one says *chock chuk chuk*, another *chuk chuk chuk*, and the third *chuk chock chock chuk*. At least this is the nearest I can make out of their notes on paper. They commence calling in May about dusk, but as soon as the rainy season begins the weird sounds cease. I found the eggs of *S. spilocephalus* at Murree in 1872, but have not been successful here.

79. ATHENE CUCULOIDES. "Burra dundul."

80. GLAUCIDIUM BRODIEI.

Very common all through forests, where on summer nights the quaint double whistle is heard on all sides.

82. HIRUNDO RUSTICA. "Charairi."

The common House-Swallow of Chamba. They arrive in the spring in numbers, frequently as early as February 1st, and stay here till the autumn. A nest may be found in every third or fourth house during April and May. A Swallow's nest in the house is looked upon as a good omen by the householder.

84. HIRUNDO FILIFERA.

85 *bis*. HIRUNDO DAURICA.

This species does not come down into the valleys, but is common during the summer at Dalhousie (7000 feet).

90 *bis*. COTYLE PALLIDA.

91. COTYLE RUPESTRIS.

93. CHELIDON CASHMIRIENSIS.

98. Cypselus melba.

I have seen flocks of these Swifts in the interior, but have not discovered their breeding-grounds. I shot one out of a flock circling over a pool about 6000 feet up, in the month of May.

99. Cypselus apus.

The Common Swift is rare in Chamba. I have only seen a few stragglers.

100. Cypselus affinis.

A large flock breeds every summer under the balconies of the Raja's palace. They leave Chamba regularly about the 1st December, and return again on the 1st March.

107. Caprimulgus indicus.

In the warm valleys and up at the hill-station of Dalhousie during the months of June and July, where its dismal note may be heard all the night through.

109. Caprimulgus albonotatus.

I have only met with this Nightjar in the cedar-forest of Kajiar. Its note is very distinct from the other—*chok-chok-chok,* a pause between each.

114. Caprimulgus monticola.

In the Chamba valley only.

129. Halcyon smyrnensis. "Nula muchrála."

Only a winter visitor in the low valleys.

134. Alcedo bengalensis. "Nika muchrála."

Found about the streams where they debouch from the hills.

137. Ceryle guttata. "Jel butara."

There is a pair of these Kingfishers about every ten or twelve miles along the big streams in the interior. I have twice found their nesting-holes in precipitous banks over rushing torrents. They breed in April and May. The holes were practically inaccessible, so I never secured their eggs.

149. PALÆORNIS PURPURASCENS.

Common on the outer slopes.

150. PALÆORNIS SCHISTICEPS.

Breeds in the forests in the first range. Horse-chestnut and bird-cherries are the trees in which they generally make the holes for their nests.

154. PICUS HIMALAYENSIS. "Turkán."

157. PICUS MACEI.

159. PICUS BRUNNEIFRONS.

160. PICUS MAHRATTENSIS.

Only in the Chamba valley.

170. GECINUS SQUAMATUS. "Tuktola."

172. GECINUS OCCIPITALIS.

174. CHRYSOPHLEGMA CHLOROLOPHUS.

I shot two in February 1882 at an elevation of 5000 feet.

180. BRACHYPTERNUS AURANTIUS.

Seen occasionally in the Ravi valley in the winter.

188. IYNX TORQUILLA.

191. MEGALÆMA MARSHALLORUM. "Traiho."

This Barbet comes down to Chamba in the winter, going about in flocks of six or eight. In the summer it is common in all the forests, the woods resounding with its loud *miaow miaow*, four or five all answering each other from the tops of different trees, each one seeming as if he was trying to call louder than the other.

195. MEGALÆMA ASIATICA. "Hútúruru."

Common in the winter on the fig-trees about the Chamba town. Breeds in the forests at low elevations.

199. CUCULUS CANORUS.

200. CUCULUS HIMALAYENSIS.

For a long time I was puzzled about the call of this Cuckoo, the deep booming notes sounding something between the notes of the Hoopoe and the Green Pigeon. One day, however, I caught him on a bare branch, with his throat puffed and tail erect, booming away, and so recognized my friend.

203. CUCULUS MICROPTERUS. "Kupulpukki."

The "Kupulpukki" is very common about Dalhousie in the summer. The natives believe it to be the ghost of a shepherd who has lost his sheep; and the translation of the call, as they make it out, is—"I left my sheep in a cool ravine, and I never can find them again."

207. HIEROCOCCYX SPARVERIOIDES.

217. CENTROPUS RUFIPENNIS.

I have seen one or two occasionally in the Ravi valley in the summer.

220. TACCOCUA SIRKEE.

For two years I have found a pair of Sirkees in June close to the town of Chamba in scrub-jungle, evidently breeding.

225. ÆTHOPYGA MILES.

Arrives in Chamba in April, and breeds in suitable localities down the valley of the Ravi. Two pairs always spend the summer in my garden.

234. ARACHNECHTHRA ASIATICA.

A few stragglers occasionally come up from the plains. I was surprised to find a pair in a valley in the interior in May, evidently breeding.

241. MYZANTHE IGNIPECTUS.

I shot one in February near the town after a snow-storm. I have not seen any record of this species being found so far north-westward before.

243. CERTHIA HIMALAYANA.

247. TICHODROMA MURARIA. "Suppurotsu."

Common all the year round on rocks near streams.

248. SITTA HIMALAYENSIS.

250. SITTA LEUCOPSIS.

The only time I ever saw this Nuthatch was on the 2nd of March, when a pair came to my Chamba garden. They were evidently passengers to the higher forests.

254. UPUPA EPOPS. "Sukdudu."

The Hoopoe comes to the town of Chamba for the summer. A pair breed in a stone wall by my house every April.

256. LANIUS LAHTORA.

257. LANIUS ERYTHRONOTUS.

258. LANIUS TEPHRONOTUS.

260. LANIUS VITTATUS.

The Shrikes are only found in the Ravi valley in the summer; they breed near the town.

269. VOLVOCIVORA MELASCHISTUS.

273. PERICROCOTUS BREVIROSTRIS. "Masti."

275. PERICROCOTUS ROSEUS.

278. BUCHANGA ALBIRICTUS.

A few in the warm valleys.

280. BUCHANGA LONGICAUDATA. "Gunkát."

Common about Dalhousie. I found two or three nests there in oak trees in my garden, placed, as usual, at the extreme end of a thin bough high up, fixed into a fork, the hen invariably sitting with her tail along the bough, so as to conceal herself.

288. TCHITREA PARADISI. "Puni pinja."

A pair bred in my garden at Chamba in the end of April. I have never seen this species here in the winter.

291. LEUCOCERCA FUSCOVENTRIS.

292. LEUCOCERCA ALBOFRONTATA.

295. CRYPTOLOPHA CINEREOCAPILLA.

296. HEMICHELIDON FULIGINOSUS.

297. ALSEONAX LATIROSTRIS.

I shot one of these birds on the 28th of October near the town of Chamba.

301. Eumyias melanops.

Very common. In April last a flock of eight or ten came into my garden at Chamba, evidently on their way back from the plains. It was the first time I had seen them gregarious.

304. Cyornis rubeculoides.

An occasional visitor in the winter.

310. Muscicapula superciliaris.

Fairly common in the forests. I have found several nests in small holes in rotten branches. It never appears to come to Chamba in the winter; I have searched in vain for it for four winters.

314. Niltava sundara.

I have obtained stray specimens near Chamba in the winter.

323 *ter.* Erythrosterna hyperythra.

333. Troglodytes nipalensis.

343. Myiophoneus temminckii. "Chonchul."

The Yellow-billed Whistling-Thrush is very common about all the streams on this side of the snowy range.

347. Cinclus asiaticus. "Jel kukri."

Very common. I found a nest under a bridge on the 7th of May with young ones; elevation 5000 feet.

351. Petrocossyphus cyanus. "Neela daraisi."

352. Oreœcetes erythrogaster.

353. Oreœcetes cinclorhynchus.

355. Geocichla citrina.

356. Geocichla unicolor.

361. Merula boulboul. "Kustura."

362. Merula albocincta. "Kundoo Kustura."

I have only met with this species in the winter, when driven down by stress of weather to the valley.

363. MERULA CASTANEA. "Lál Kustura."

364. TURDUS RUFICOLLIS.

I have shot two specimens of this rare Thrush, after a snow-storm, in my Chamba garden.

365. TURDUS ATROGULARIS. "Darairi."

Common in the winter. Flocks of Thrushes and Blackbirds of all sorts come down whenever it snows here.

368. TURDUS VISCIVORUS.

The Missel-Thrush breeds in the Kalatope forests. I have never seen the Fieldfare or the Redwing. I doubt their occurrence in the Himalayas.

370. OREOCINCLA MOLLISSIMA.

392. STACHYRIS PYRRHOPS.

A winter visitor to Chamba after snow. In summer it is to be found up the valleys in the interior amongst the scrub-jungle.

405. POMATORHINUS ERYTHROGENYS.

407. GARRULAX LEUCOLOPHUS.

411. GARRULAX ALBOGULARIS.

415. TROCHALOPTERON ERYTHROCEPHALUM. "Sahrót."

416. TROCHALOPTERON CHRYSOPTERUM.

418. TROCHALOPTERON VARIEGATUM.

421. TROCHALOPTERON RUFOGULARE.

425. TROCHALOPTERON LINEATUM. "Jerrow."

The above-named Laughing-Thrushes represent all the species of this family to be found within Chamba limits. The Trochalopterons come down in the winter, but the others never seem to leave the forest or low brushwood-jungles.

430. SIBIA PICAOIDES.

None of the *Malacocerci* or *Chatarrhææ* penetrate up the Chamba valley ; I have only found them on the outer slopes low down.

444. Hypsipetes psaroides. "Durkál."

The commonest bird (excepting the Myna) in Chamba during the winter. A flock of over 100 are always about the trees in my garden. They breed in the bushes at about 2000 feet above Chamba.

458. Otocompsa leucogenys. "Painju."

Common all the year round.

461. Pycnonotus pygæus. "Kala painju."

470. Oriolus kundoo. "Umhál."

Arrives in the valley in the spring and leaves in October. Breeds near the town of Chamba.

475. Copsychus saularis. "Dheemdu."

481. Pratincola caprata.

Breeds in the Chamba valley in May.

483. Pratincola indica.

486. Pratincola ferrea.

489. Saxicola picata.

An occasional winter visitor.

497. Ruticilla rufiventris.

499. Ruticilla erythrogastra.

I shot two specimens of this rare Redstart one winter near the town; one was among the boulders on the river, flitting about exactly like a *Chimarrhornis,* for which I mistook it until I saw the white wing-patch.

503. Ruticilla frontalis.

504. Ruticilla cæruleocephala.

505. Ruticilla fuliginosa.

506. Chimarrhornis leucocephala.

The two last-named species are common about every stream.

507. Larvivora superciliaris.

508. Nemura cyanura.

511. Tarsiger chrysæus.

This is, I think, a new locality for the Golden Bush-Chat. I can find no record of its having been found previously in the N.W. Himalayas. I shot two specimens about a mile from the town in the depth of winter.

513. Calliope pectoralis.

515. Acrocephalus brunnescens.

517. Acrocephalus agricola.

527. Horornis pallidus.

530. Orthotomus longicauda. "Söía."

The Tailor-birds build in my garden at Chamba every summer, sewing the leaves of the loquát-trees together. They remain here all the year round.

543. Drymoipus inornatus.

In the winter occasionally seen.

547. Suya crinigera.

549. Suya atrogularis.

550. Burnesia gracilis.

551. Franklinia buchanani.

554. Phylloscopus tristis.

560. Phylloscopus viridanus.

563. Reguloides occipitalis.

564. Reguloides trochiloides.

565 *bis*. Reguloides humii.

566. Reguloides proregulus.

573. Abrornis albosuperciliaris.

Common all the year round; breeds both up at Dalhousie and in the valleys.

580. Regulus cristatus.

I met with a flock of Firecrests in the Jamwar forest in March 1882. They are by no means common.

582. Sylvia affinis.

584. Henicurus maculatus. "Naraisi."

The Spotted Forktail is common about every stream in Chamba. In April it commences breeding, and does not seem particular as to the elevation at which it builds. I have found a nest in the root of a fallen devdat tree near where snow was lying in a ravine, about 7000 feet up, and several pairs remain all the summer in their winter-quarters between 2000 and 3000 feet up.

587. Henicurus scouleri.

The Little Forktail is fairly common in the winter. It builds under rocks by streams in the interior over 7000 feet elevation.

589. Motacilla maderaspatana.

590. Motacilla personata.

591. Motacilla alba.

592. Motacilla melanope.

594. Budytes calcaratus.

The Grey Wagtails generally arrive in February. Early in March numbers may be seen on the green in front of the town, but by the end of the month there is scarcely one left. The Yellow Wagtails arrive later and stay a very short time. In August I saw a number of *M. alba* and *M. melanope* on a stony plain just by the top of the Sanch Pass, 14,500 feet.

596. Anthus agilis.

597. Anthus trivialis.

600. Corydalla rufula.

604. Agrodroma sordida.

605. Anthus cervinus.

605 *quat.* Anthus blakistoni.

606. Heterura sylvana.

623. Ixulus flavicollis.

There is no previous record, I believe, of an *Ixulus* being found so far north-west. There were several in my Chamba garden in April 1882, but they only stayed a few days.

631. ZOSTEROPS PALPEBROSUS.

Common all the year round; breeds in my garden.

632. SYLVIPARUS MODESTUS.

633. CEPHALOPYRRHUS FLAMMICEPS.

Large flocks arrive about the 2nd of April, and are found on the plum- and peach-trees feeding busily among the blossoms; they disappear generally the following day.

634. ÆGITHALISCUS ERYTHROCEPHALUS.

638. LOPHOPHANES MELANOLOPHUS.

644. PARUS MONTICOLA. "Didalu."

645. PARUS CINEREUS.

647. MACHLOLOPHUS XANTHOGENYS.

653. ACCENTOR ALTAICUS. "Phondaisi."

Comes down in large flocks in the winter.

654 *bis*. ACCENTOR JERDONI.

These were the only two Accentors I shot; but I saw in Pangi two species which I believe to have been *A. nipalensis* and *A. monticola*.

660. CORVUS MACRORHYNCHUS.

The common Crow of the hills of Chamba.

666. NUCIFRAGA HEMISPILA.

The shikaries tell me of a bird which answers to the description of *N. multimaculata* being seen frequently in the pine-forests in the interior, but I have not seen it myself.

668. PICA RUSTICA.

Occurs in the highlands of Pangi, the other side of the Chenab river.

669. GARRULUS BISPECULARIS.

670. GARRULUS LANCEOLATUS. "Banár."

672. UROCISSA FLAVIROSTRIS. "Chainchul."

674. DENDROCITTA RUFA. "Tindár."

676. DENDROCITTA HIMALAYENSIS. "Kuppru."

679. Fregilus himalayanus.

680. Pyrrhocorax alpinus.

681. Sturnus vulgaris.

682. Sturnus nitens.

684. Acridotheres tristis. "Gotári."

686. Acridotheres fuscus.

689. Temenuchus pagodarum.

700. Passer domesticus. "Tiddi."

708. Passer cinnamomeus.

For two seasons one of these Sparrows used to sit on a balcony outside my dressing-room window at my Dalhousie house and fly against the window-panes, banging the glass with its beak and claws, going on till it was absolutely exhausted. It continued this game for four or five hours a day during the months of May and June. Nothing frightened it away for more than a few minutes. Towels were hung out with no effect. The window was opened; it went to another. Even bird-lime was discovered and avoided. It did not mind seeing people in the room. At times the bird would continue its assault on the glass when it had scarcely strength to fly at the window. Its beak open, wings drooping, it presented a picture of misery and mania! It had a nest under the eaves each summer. At the end of June in the second year of its visitation it disappeared, worn out, doubtless, by the unusual labours it had gone through.

710. Passer montanus.

711. Passer flavicollis.

714. Emberiza stracheyi.

718. Emberiza stewarti.

720. Emberiza pusilla.

I met with the Dwarf Bunting only in Pangi.

724. Melophus melanicterus.

725. Hesperiphona icteroides. "Tangaira."

This Grosbeak must be common in the pine forests at higher altitudes, judging from the numbers that come down during severe winter weather to Chamba. It is only after a very heavy fall of snow that they descend. One winter over three hundred were shot in the course of a week. Their flesh, which is excellent eating, is much esteemed by the natives. I have never succeeded in finding their nests here, though I was more fortunate in Murree.

727. Mycerobas melanoxanthus.

I secured three or four specimens of the Spotted-winged Grosbeak one winter. They were with the black and yellow ones.

729. Pyrrhula erythrocephala.

I met with a flock of ten or twelve Bullfinches early in April up at Dalhousie; as I had no gun, I failed to secure a specimen. I watched them for some time, and believe they belonged to this species.

732. Pyrrhula aurantiaca.

Rare in the forests at 6000 or 7000 feet elevation.

738. Carpodacus erythrinus.

747. Pyrrhospiza punicea.

When close by the crest of the Sanch Pass at dawn on the 20th September 1881 (alas! my gun had gone on ahead to camp), I saw a pair of these beautiful red-breasted Finches feeding their fully fledged young on a rock not far from my path. I had my binocular with me, so was able to watch them closely for about a quarter of an hour, when they disappeared down a ravine. There was no mistaking the species.

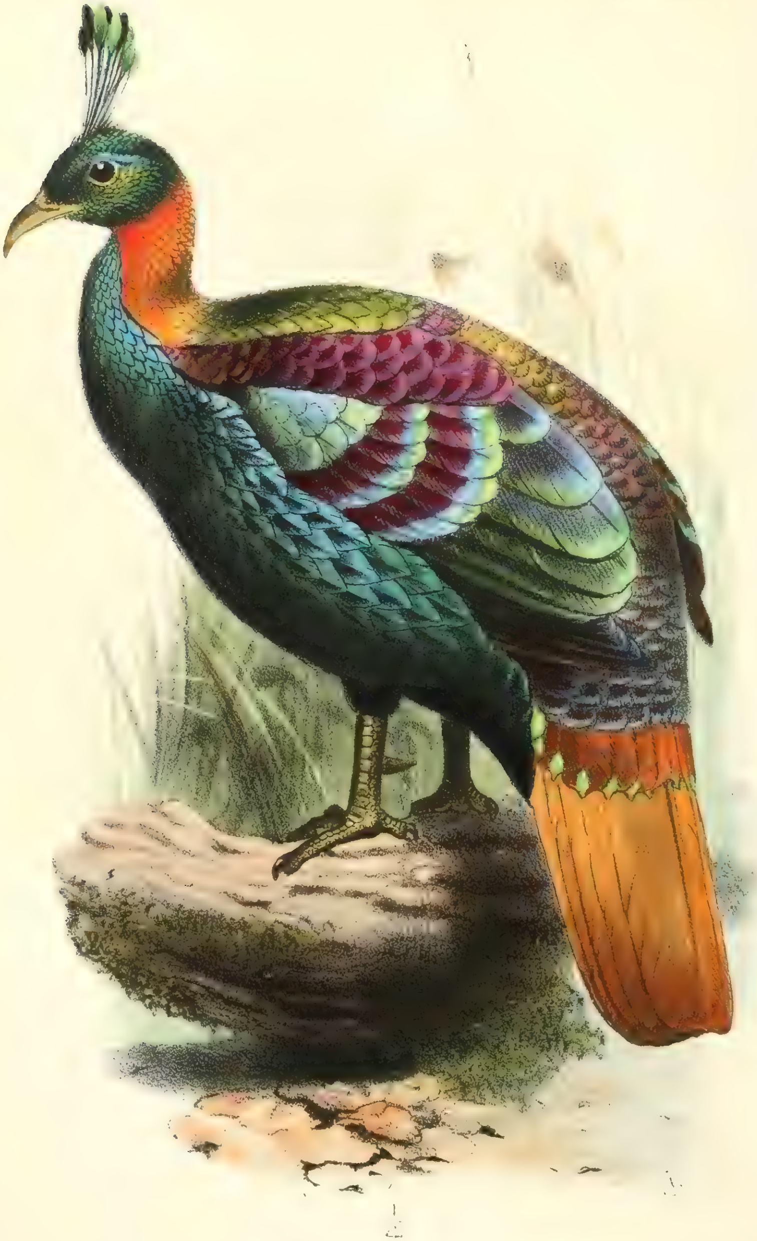
748. Calacanthis burtoni.

In the winter a few come down to Chamba.

749. Carduelis caniceps.

750. Chrysomitris spinoides.

Ibis 1864 Pl. X.



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LOPHOPHORUS CHAMBANUS.

751. METOPONIA PUSILLA.

The gold-headed Finches come here in flocks in March, but stay a very short time.

753. FRINGILAUDA SORDIDA.

Very common all through the winter in large flights.

767. ALAUDA GULGULA.

778. SPHENOCERCUS SPHENURUS. "Kokla."

784. PALUMBUS CASIOTIS. "Dhanud."

787. PALUMBŒNA EVERSMANNI.

788. COLUMBA INTERMEDIA.

789. COLUMBA RUPESTRIS.

790. COLUMBA LEUCONOTA. "Bujul."

The Snow-Pigeons and *Palumbus casiotis* come down about Chamba in very large flocks in the winter. I only once got *P. eversmanni*. *Columba rupestris* I met with in the Pangi valley breeding in the precipitous cliffs overhanging the Chenab.

792. TURTUR RUPICOLA. "Coin."

795. TURTUR SURATENSIS.

796. TURTUR RISORIA. "Googi."

797. TURTUR HUMILIS.

803. PAVO CRISTATUS. ♂ "Mohr," ♀ "Bodur."

804. LOPHOPHORUS IMPEYANUS. "Nilgur."

804 *ter*. LOPHOPHORUS CHAMBANUS, sp. nov. (Plate X.)

Two years ago a Monál Pheasant was brought in to me from the Birnóta forest (in the Chamba State, N.W. Himalaya), which I saw at once was very different from *L. impeyanus*. Its bronzed lower back and green breast made it easily distinguishable from any other known species. My brother, Major George Marshall, R.E., who was with me, suggested that I should describe it then; but fearing that it might be a mere variety, I considered it best to wait until more specimens could be procured. The following spring Mr. A. L. Seale (to whom I have given a contract to shoot

Monál and Argus for skins in Chamba during the season) told me that he had had three specimens of what he called "the Black-backed Monál" brought in to him from the same direction that my bird came from. On comparison I found that they agreed exactly with mine. This being, I consider, sufficient proof that it is a distinct species, I propose for it the name *Lophophorus chambanus,* after the Raja of Chamba, in whose territories it was discovered. The distinctive marks that separate this species from *L. impeyanus* are unmistakable. There is not a trace of white on the back; this colour is replaced by a bronzed purple. The breast, instead of being black, is burnished green, the colour being somewhat fainter than that on the green feathers at the sides of the neck.

The type of this new species, from which the figure (Plate X.) has been taken, I sent to Mr. Sclater, who has kindly deposited it in the British Museum.

806. Ceriornis melanocephala. "Fulgun."

The Horned Pheasant is plentiful in suitable localities throughout Chamba; a few are to be found in Pangi, the other side of the snowy range. They are the most delicate of all the Pheasants in confinement. The food on which they thrive best is chopped lettuce and turnips with wheat. Mr. Seale has succeeded in taking a large number in good health to Calcutta for Mr. Jamrach; but very few, I believe, reach England alive. When I first came to Chamba I found that these Pheasants and the Monál were being gradually exterminated by being snared and shot in the breeding-season. All snaring has now been stopped, and £300 is paid annually for the right to shoot cock birds from November till March. About 1200 skins are collected each season. The birds are rapidly increasing in numbers.

808. Pucrasia macrolopha. "Kukróla."

The Koklass is not common in any part of Chamba. Its solitary habits and predilection for thick forests make it difficult to turn out except with dogs. It bears confinement well.

809. Phasianus wallichii. "Cháman."

Fairly abundant on the grassy hills away from forests.

810. Euplocamus albocristatus. "Kolsa."

Very common throughout Chamba on this side of the snows. Very difficult to tame.

812. Gallus ferrugineus. "Bun kookur."

Only in the low hills near where the Ravi flows out into the plains.

816. Tetraogallus himalayensis. "Galound."

The "Galound" is, next to the hen Monál, considered the best of the Pheasants for eating by the Chambials. It is, however, a rare treat, as the birds frequent the bare spurs up by the snows, and are therefore not easily shot.

817. Lerwa nivicola. "Biju."

The Lerwa is found in packs all along the first snowy range; but I am told that it does not occur on the ranges beyond Pangi.

818. Francolinus vulgaris. "Kala titur."

There are a good many in the Chamba valley, but the natives say that they were originally imported from the plains.

820. Caccabis chukor. "Chukru."

The Chukor abounds all over Chamba, extending beyond the snows into Pangi.

824. Arboricola torqueola. "Róli," or "Ram chukru."

This is the only one of the Wood-Partridges that occurs in Chamba; it frequents the forests where the Argus and Koklass are found.

829. Coturnix communis. "Butair."

The Grey Quail only occurs during passage, staying for from fifteen days to a month in April.

Turnix, sp. inc.

One of the Button-Quails occurs down the Ravi valley, but I have never been able to secure a specimen.

851. Vanellus cristatus.

An occasional winter visitor.

855. Lobivanellus goensis.

A pair of these birds (so common in the plains) breed every April among the reeds bordering the little lake in a glade of the Kajiar deodar forest, elevation 6900 feet.

867. Scolopax rusticula. "Chinjarole."

The Woodcock breeds in thickets at 10,000 and 11,000 feet elevation, and comes down to the Ravi valley when driven by snow. It takes a heavy fall to bring in "Chinjarole," and he stays as short a time as possible. There are certain places about the town where Woodcock may be found for a certainty after a snow-storm, one being among the plantation trees in my vegetable garden. Last February we shot sixty-six in and near Chamba. This winter, which has been a mild one, a dozen have not been found. Though I offered a reward for the eggs, I have not succeeded in getting any. But the Woodcock has been frequently seen in the breeding-season by sportsmen in the highlands of Chamba.

868. Gallinago nemoricola.

869. Gallinago solitaria.

Both of these Snipes must breed on this side of the snowy range, as they have been met with and shot in the breeding-season in the interior at high elevations. They never come to the Ravi valley, like the Woodcock does, though they have been frequently shot during snow just below Dalhousie at 5000 feet, the Solitary being the commoner of the two.

871. Gallinago scolopacina.

891. Actitis glareola.

893. Actitis hypoleucos.

894. Totanus glottis.

901. Hydrophasianus chirurgus.

Two specimens of this Jacana have been shot in different years in the highlands of Pangi, the other side of the snows, in the summer time.

903. Fulica atra.

905. Gallinula chloropus.

923. Ardea cinerea.

936. Botaurus stellaris.

957. Spatula clypeata.

958. Anas boscas.

961. Chaulelasmus streperus.

962. Mareca penelope.

964. Querquedula crecca.

969. Fuligula nyroca.

The Ducks are only passengers through in the autumn and spring. There is a marsh about a mile from the town, where they frequently take twenty-four hours' rest on their way to the plains. They never stay longer by any chance. On their return journey very few rest here.

975. Podiceps minor.

984. Hydrochelidon indica.

986. Sterna hirundo.

1005. Graculus carbo. "Jel Kawar."

1007. Graculus javanicus.

XLII.—*Notes on a Collection of Birds from Lankoran.*

By Henry Seebohm.

An opportunity of examining a collection of 600 skins of birds from the vicinity of Lankoran, on the southern shores of the Caspian, enables me to add several species to the list of Persian birds, and to make some corrections in geographical distribution.

Aquila nævia.

Four examples of the Spotted Eagle belong to the larger of the two European forms, and would be regarded as *A. clanga* by those ornithologists who separate them.

Buteo menetriesi.

Eight Buzzards vary in length of wing from 16 to 15 inches. The smaller birds (probably males) have no bars on the basal three fourths of the tail, and are very chestnut in colour. The larger birds (probably females) have the tail regularly barred, and are dark brown in colour, more or less suffused with chestnut on the head, wing- and tail-coverts, and the underparts. I think these birds must be regarded as rather large examples of *B. desertorum.*

ERITHACUS GOLZI.

Seven specimens of Nightingales belong to the long-tailed species known as the Persian Nightingale.

PRATINCOLA MAURA.

Three male Stonechats belong to the eastern form of this bird, having unspotted white rumps.

ACROCEPHALUS TURDOIDES.

A series of fifteen Great Reed-Warblers satisfactorily disposes of the doubts which have hitherto been felt as to the correctness of the identification of this species by Ménétries. Its breeding-range must therefore be regarded as extending into North Persia and West Turkestan. In Severtzow's collection I found examples of this species, as well as of *A. stentoreus,* the species which Blanford found in South Persia. The Lankoran skins vary in length of wing from 3·9 to 3·6 inches, and have the second primary equal to the third or fourth.

ACROCEPHALUS ARUNDINACEUS (Briss.).

ACROCEPHALUS PALUSTRIS.

Of a series of sixteen small Reed-Warblers, one only proves to be the Reed-Warbler, all the others being Marsh-Warblers.

HYPOLAIS PALLIDA-RAMA.

Three examples of Tree-Warblers are, like most of those collected in Persia by Blanford, intermediate between *H. pallida* and *H. rama.*

HYPOLAIS ICTERINA.

An example of the Icterine Tree-Warbler adds a new species to the list of Persian birds.

SYLVIA NISORIA.

SYLVIA ATRICAPILLA.

Four male Blackcaps and one female are interesting as confirming the identification of Ménétries. East Persia appears to be the eastern limit of the range of this species; but the Barred Warbler is found throughout Russian Turkestan.

SYLVIA FUSCIPILEA.

Curruca cinerea, var. *persica*, Filippi, Viagg. Pers. pp. 162, 348 (1865).

Sylvia cinerea, *β. fuscipilea*, Severtzow, Journ. Orn. 1875, p. 176.

An example of the eastern form of the Whitethroat is interesting. It seems to me to be fairly entitled to subspecific rank. It is slightly larger than our bird (wing 3 inches); the general colour of the upper parts is darker and greyer, especially on the head and neck, and the chestnut on the wing-coverts is much duller. I have three examples, obtained by Tancrè's collectors in the Altai Mountains; Prjevalski obtained it in the Eastern Thian-Shan range, Severtzow found it in Turkestan, and various collectors have obtained it in Persia. In the two latter countries our bird also appears.

SYLVIA CURRUCA.

An example of the Lesser Whitethroat belongs to the western and not to the eastern form. The second primary is intermediate in length between the fifth and sixth.

SYLVIA MYSTACEA.

Three males and a female of Bowman's Warbler are very interesting, being in full breeding-plumage. Neither Blanford's plate of *Sylvia rubescens* ('Eastern Persia,' ii. pl. xii.) nor Dresser's plate of *Sylvia momus* ('Birds of Europe,' ii. pl. lxiii.) do justice to this beautiful bird, which has the black head of *S. melanocephala*, and the vinous red breast and throat of *S. subalpina*.

PHYLLOSCOPUS TROCHILUS.

PHYLLOSCOPUS RUFUS.

Five examples of the former and three of the latter species are interesting, confirming the correctness of Blanford's identifications, and showing that both the Willow-Wren and the Chiffchaff occur in North Persia.

PARUS PENDULINUS.

A skin of the Penduline Tit does not differ from European examples.

PARUS LUGUBRIS.

A skin of the Sombre Tit agrees with examples from Greece and Asia Minor, and does not show the tendency to be greyer above and whiter below which Blanford found in examples from South Persia.

EMBERIZA CIA.

An example of the Meadow-Bunting is intermediate between the eastern and western forms, and might almost be regarded as *E. stracheyi,* but being in the abraded plumage of late summer is difficult to determine.

MOTACILLA MELANOCEPHALA.

MOTACILLA FLAVA.

MOTACILLA RAYI.

Six males and two females of this Yellow Wagtail are very interesting examples, showing that there is no difference to be found in the plumage of specimens from the eastern colony in the basin of the Caspian, and those from the western colony on the shores of the Atlantic. This is one of the most interesting cases of a discontinuous area of distribution with which I am acquainted. Amongst the examples of *M. melanocephala* is one with a brilliant yellow eye-stripe—a very curious variety, if it is not a hybrid between *M. rayi* and *M. melanocephala*.

ALCEDO ISPIDA.

Two skins of Kingfishers are intermediate between the western and eastern forms of this species (wing 2·8 inches), and might be regarded as large examples of *A. bengalensis.*

These intermediate forms have been called *A. pallasii*. There can be little doubt that the three forms are merely local races of one species.

ARDEA COMATA.

Nine Squacco Herons add a species to the list of Persian birds enumerated by Blanford, and confirm the statements of Pallas that this species is found on the Caspian. There can be little doubt that this was the species seen by Filippi in countless numbers, and not the Buff-backed Heron, as he supposed. So far as I can ascertain, the latter bird (*A. bubulcus*) is only a very rare and accidental straggler beyond Africa, Spain, and Palestine.

PORPHYRIO POLIOCEPHALUS.

Ten examples of the Indian Purple Gallinule, with green wings and blue-green throat and breast, contrasting with the purple of the rest of the plumage, are very interesting. It seems probable that *P. cæruleus* is confined to South Europe and North Africa west of the Adriatic, being replaced in North-east Africa by *P. smaragdonotus*, with purple wings and a green back, and in Asia by *P. poliocephalus*, but being unrepresented in East Europe*.

CHARADRIUS ASIATICUS.

Two examples confirm the correctness of the locality given by Pallas for the Caspian Plover.

TOTANUS FUSCUS.

An example of the Spotted Redshank confirms the statement of Pallas that this species winters on the southern shores of the Caspian.

CYGNUS OLOR.

One example of the Mute Swan adds a species to the list of Persian birds.

ERISMATURA LEUCOCEPHALA.

Thirty-six examples of the White-headed Duck entitles this species to be added to the Persian list.

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* See remarks on this subject by Mr. Sclater, 'Ibis,' 1879, p. 196.

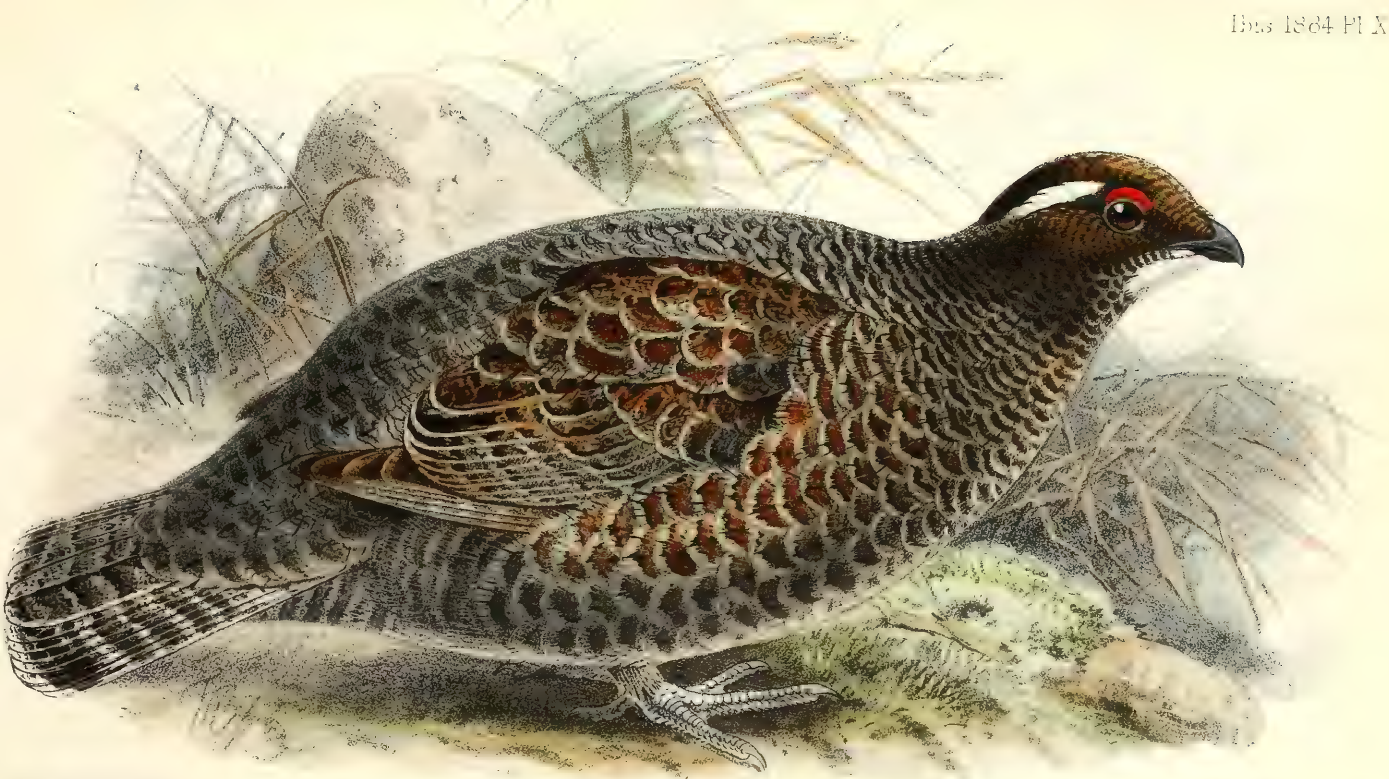
XLIII.—*On* Tetrao griseiventris, *a recently described Species of Hazel-Grouse from North-east Russia.* By HENRY SEEBOHM.

(Plate XI.)

THE Grouse form a compact little genus, confined to the Palæarctic and Nearctic Regions, and containing about a score of well-defined species, some of which are again divisible into climatic races or subspecies. Modern ornithologists, suffering from the epidemic which has been called the "furor genericus" and the "cacoëthes dividendi," have established no less than twelve genera for the reception of these twenty or twenty-four species, to the no small inconvenience of ornithologists whose powers of memory are not unlimited. As might be expected, the characters upon which these so-called genera are founded are not very reliable—so little, indeed, that the Willow-Grouse belongs to the genus *Tetrao* in summer, but assumes the characters of the so-called genus *Lagopus* in winter.

The Hazel-Grouse (*Tetrao bonasia*) has a very wide range, extending from the Pyrenees to Japan, and presents an interesting example of a species which has a Siberian or Arctic form. *Tetrao bonasia septentrionalis* is a very grey bird, with very little rufous in its plumage, and has a shorter tail than the typical form, towards which it gradually intergrades, as so many other Arctic forms do, both in the east and in the west. The typical or subarctic form is found in the Pyrenees, the Alps, and the Carpathians, and again in the valley of the Amoor and on the main island of Japan.

It is not known that any form of Hazel-Grouse inhabits the Caucasus; but north-east of that range, near the sources of the Petchora and the Kama, a nearly allied, but apparently perfectly distinct, species occurs, *Tetrao griseiventris*. From twenty to thirty examples of this new European bird have been obtained; so that all idea of its being an accidental variety must be abandoned. It was first described by the well-known Moscow ornithologist, Mons. M. A. Menzbier, in 1880 (Bull. Soc. Imp. Nat. Mosc. i. p. 105), and differs from



J G Keulemans lith

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TETRAO GRISEIVENTRIS.

the Common Hazel-Grouse in many very important characters. Whilst in the Common Hazel-Grouse the male differs widely from the female, the former having a black chin and throat, and the latter a buffish-white chin and throat obscurely spotted with black, in Menzbier's Hazel-Grouse both sexes have the chin and upper throat pure white. As will be seen by the Plate, the general colour of Menzbier's Hazel-Grouse is much darker and greyer, especially on the underparts, the pattern of colour in which is different from that of the common bird. The white tips of the wing-coverts and the subterminal black band across the outer tail-feathers, so conspicuous in the Common Hazel-Grouse, are absent in Menzbier's Hazel-Grouse.

The discovery of this addition to the birds of Europe is all the more interesting on account of the other European species, which are confined to the extreme east of the continent, such as *Ruticilla ochrura, Erithacus hyrcanus, Tetrao mlokosiewiczi*, &c., leading to the supposition that this part of Europe must have been isolated for some time, at no very distant period, geologically speaking.

XLIV.—*On a Collection of Bird-skins from the Orinoco, Venezuela.* By Hans von Berlepsch.

(Plate XII.)

The vast plains of the Orinoco, in Venezuela, still remain a "terra incognita" to ornithologists—at least no account of the birds of this country has yet been published.

It was therefore with considerable interest that I heard of a collection of bird-skins made in the neighbourhood of Angostura (or Ciudad Bolivar) by a young man sent out by the well-known dealer in natural objects, Mr. F. F. G. Umlauff, of Hamburg. The whole collection has been submitted to my inspection and, although small, proves to be of considerable interest. There is evidently one new species contained in it, and others were not previously known to be denizens of

Venezuela. I have therefore thought it well to give an account of all the species found in the collection.

Umlauff's collector has just returned home, bringing with him a few more skins collected on the Rio Apure, a tributary stream of the Orinoco. The birds collected on the Apure mostly belong to widespread species of Ardeidæ, &c.; they are likewise inserted in the following list.

It is much to be regretted that examples of so few species are in the collection, especially of birds of small size, among which probably still many novelties remain undiscovered in the Orinoco plains; but I am glad to say Mr. Umlauff intends to send out another collector, who we may hope will be more successful.

1. CAMPYLORHYNCHUS NUCHALIS, Cab.

Angostura. One specimen agreeing with my specimens from Puerto Cabello, but with a somewhat shorter bill, and the back more conspicuously striped. There is only one broad white stripe on each feather of the back, beginning deep from the base, while in Puerto-Cabello specimens there are two, one basal, the other terminal, both pear-shaped and separated in the middle. I believe that this difference is only an individual one, and that the Angostura bird may not be fully adult.

Long. al. 73, caud. 72½, culm. 17, tars. 22½ millim.

2. ANTHUS RUFUS (Gmel.).

Angostura. One specimen, in much faded plumage, seems to agree with Bahia skins, with the exception that there is no yellowish suffusion on the abdomen. The outer tail-feather is nearly wholly white.

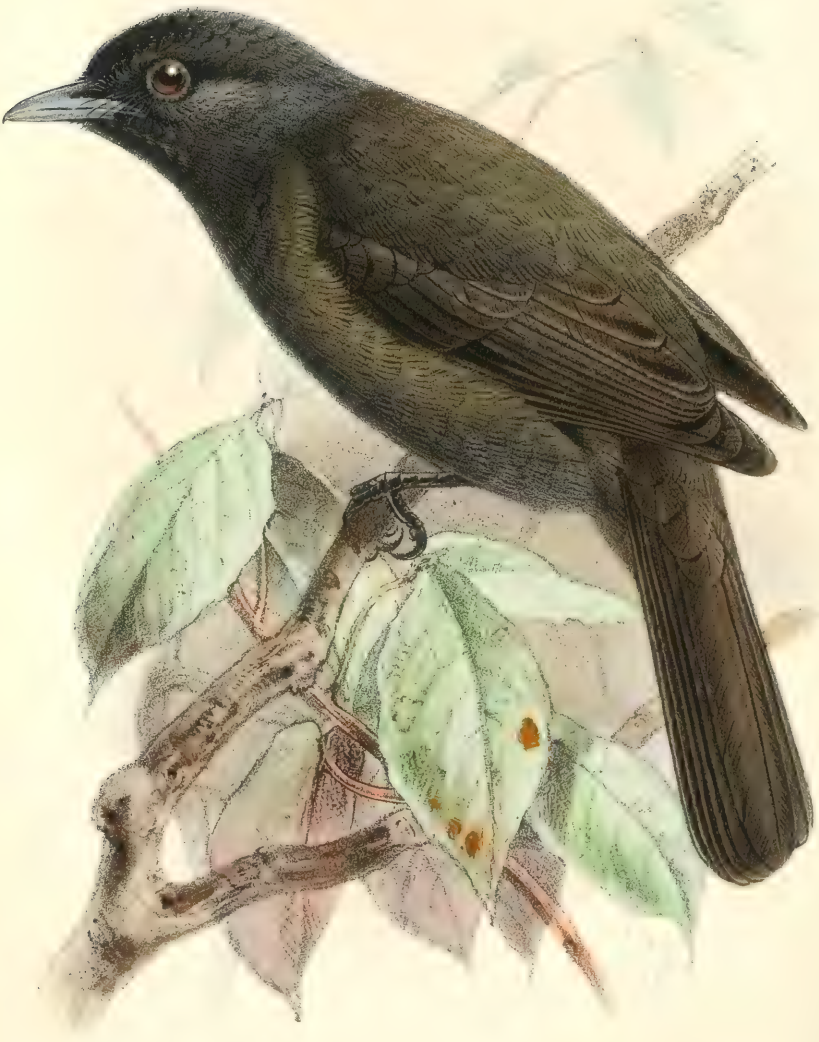
Long. al. 65, caud. 49, rostr. culm. 11½, tars. 19½ millim.

This species has not hitherto been recorded from Venezuela.

3. CERTHIOLA LUTEOLA, Licht. & Cab.

Angostura. One specimen, agreeing with birds from Puerto Cabello.

Long. al. 59, caud. 36, culm. 12½, tars. 16 millim.



J. G. Keulemans lith.

Hanhart imp.

CNIPOLEGUS ORENOCENSIS

4. Sycalis columbiana, Cab.?

Mus. Hein. i. p. 147 (Puerto Cabello).

Angostura. A female. Not having yet seen this small bird from the Orinoco, I am not quite sure about the correctness of this determination, although my bird agrees tolerably well with the description given by Prof. Cabanis of the female of his *S. columbiana*.

The Angostura bird is very different from the female of *S. flaveola*, not only in its exceedingly small size but also in, coloration. The upper parts are of a uniform greyish olive, with quite indistinct darker basal marks on the feathers. Top of head and sides of head still more suffused with greyish. Underparts brownish white, throat and middle of abdomen purer white, breast and sides of belly marked with indistinct narrow shaft-stripes of dark brown. Under tail- and wing-coverts pale yellowish white, the inner webs of the wing-feathers similarly edged. Wing- and tail-feathers externally edged with olive-yellow. Upper mandible dark brown, the lower beneath and feet yellowish.

Long. tot. 112, al. 60, caud. 44, culm. $10\frac{1}{2}$, tars. 15 millim.

5. Cassicus persicus (Linn.).

Angostura and Rio Apure.

♂ ad. Angostura: al. $158\frac{1}{2}$, caud. $104\frac{1}{2}$, culm. $35\frac{3}{4}$, tars. $30\frac{1}{2}$ millim.

♀ ad. Apure: al. 149, caud. 102, culm. $32\frac{1}{4}$, tars. $30\frac{1}{2}$ millim.

6. Cyanocorax violaceus (DuBus).

Angostura. One specimen not quite adult and smaller in size than my birds from Eastern Ecuador, but hardly differing in colours.

Long. al. 176, caud. 160, culm. 35, tars. $46\frac{1}{2}$ millim.

A species not yet recorded from Venezuela.

7. Cnipolegus orenocensis, sp. nov. (Plate XII.)

C. pileo cum capitis lateribus nigris, nitore nonnullo, corpore reliquo supra subtusque obscure ardesiaco, olivascenti lavato; alis caudaque cum tectricibus caudæ superioribus nigrescentibus, unicoloribus; remigibus eorumque tectricibus superioribus extus olivaceo-griseo inconspicue marginatis; rostro cyanescenti-plumbeo, apice nigro, tomiis pallidioribus, pedibus nigris. Long. tot. 162, al. 78, caud. 73, culm. 15¾, tars. 20 millim.

Hab. Angostura. One specimen.

Obs. *C. unicolori* (Kaup), ex Amazonia, ut videtur, remigibus concoloribus nec angustatis maxime affinis, sed multo major et corpore olivaceo-ardesiaco (nec nigro) diversus.

I have not yet had an opportunity of comparing my specimen with *C. unicolor* from Amazonia, but Mr. Sclater, after examination of the Angostura bird, assures me that it is quite distinct and belongs to an undescribed species. No species of *Cnipolegus* is yet known to extend its range so far north as *C. orenocensis*.

8. MYIOZETETES TEXENSIS COLUMBIANUS (Cab. & Heine).

Angostura. One specimen in faded plumage (long. al. 84½, caud. 68½, culm. 14, tars. 17½ millim.), agreeing with a bird in my collection from Western Venezuela (coll. Goering), the latter being in fresh plumage.

Birds from Venezuela (named "*texensis*" by Mr. Sclater and others) differ constantly in many particulars as compared with specimens from Central America. The diagnosis of Messrs. Cabanis and Heine (Mus. Hein. ii. p. 62, descr. de Puerto Cabello and Cartagena) does not fit it very well. I therefore propose to distinguish the Venezuelan bird as follows:—"*M. t. columbianus* ex Venezuela a *M. texensi* ex Am. centr. alis caudaque brevioribus, fronte brunnescenti-cinereo (nec albescente), pilei lateribus obscurioribus, dorso obscurius olivaceo, et gula magis flavo tincta distinguendus."

9. PITANGUS DERBYANUS RUFIPENNIS, Lafr.

Angostura. One specimen.

Long. al. 111, caud. 86½, culm. 29¾, tars. 24 millim.; agreeing with a specimen from Puerto Cabello in Mus. H. v. B.

In this race of *P. derbyanus* the rufous on the tail- and wing-feathers is of still greater extent than in typical birds from Mexico, the outer tail-feathers being nearly wholly rufous. In addition to this character the front is darker, more mixed with greyish, the back more suffused with rusty, the abdomen paler sulphur-yellow, and the bill shorter.

10. Milvulus tyrannus (Linn.).

Angostura. An old male.

Long. al. 102½, caud. 265, culm. 16½, tars. 16½ millim.

11. Ceryle torquata (Linn.).

Rio Apure. Two males, one female.

♂ ♂. Long. al. 194, caud. 118½–123½, culm. 76–81, tars. 13½–14 millim.

♀. Long. al. 202, caud. 127½, culm. 81, tars. 15 millim.

These specimens agree in every respect with a series of birds from Central America (Honduras) and Southern Brazil (Rio Grande do Sul) in Mus. H. v. B.

12. Bucco bicinctus (Gould).

Angostura. Three specimens, agreeing with individuals from Puerto Cabello, perhaps of somewhat larger size.

Long. al. 88½–90, caud. 81½–86½, culm. 33½–34½, tars. 19–20½ millim.

13. Crotophaga ani, Linn.

Angostura. An adult.

Long. al. 152½, caud. 190, rostr. culm. 38, altitud. maxill. basi 17½, tars. 39½ millim.

14. Piaya cayana guianensis (Cab. & Heine).

Angostura. One specimen, differing from the birds from Puerto Cabello in showing no rufous on the under surface of the tail, this colour being always conspicuous in skins from the latter locality. The former is more like Bahia skins, although smaller in size. It seems to agree best with the description of *P. guianensis*, Cab. & Heine, which is also said by the describers to be an inhabitant of Venezuela.

Long. al. 142½, caud. 280, culm. 30, tars. 37 millim.

15. Strix flammea pratincola, Bonap.

Rio Apure. An old bird.

Long. al. 320, caud. 134, culm. 27½, tars. 72 millim.

This bird is of large size, with rather powerful legs, and the lower part of the tarsus is only scantily feathered just as in *S. furcata*. The tail is not white as in *S. furcata*, but barred with dusky. The plumage generally is dark and much mixed with rufous; there is only some pure white on the throat and the middle of the abdomen. Specimens from Southern Brazil are smaller in size and have the tarsus more feathered.

It seems therefore that the Venezuelan Barn-Owl agrees best with that from North America.

16. SCOPS BRASILIANUS (Gmel.).

Angostura. An old bird, agreeing generally with Bahia skins, but somewhat lighter above and the stripes beneath narrower.

Long. al. 161, caud. 89, culm. $16\frac{3}{4}$, tars. 31 millim.

17. GLAUCIDIUM JARDINII, Bonap.

Angostura. One specimen in the brown phase, as described by Mr. Sharpe, but the back with a greyish-brown cast, and the upper tail-coverts rufous-brown in strong contrast. The feathers of the back are mottled, each feather with two or three mostly pear-shaped whitish spots, the spots near the base inclining to bars and more suffused with tawny. The markings on the head are mostly rounded, sometimes linear. Tail-feathers black, with six white bars (including that on the base), interrupted in the middle.

Long. al. 88, caud. 53, culm. $12\frac{1}{4}$, tars. 19 millim.

18. ASTURINA MAGNIROSTRIS (Gmel.).

Rio Apure. An old bird.

Long. al. 230, caud. 152, culm. $20\frac{1}{2}$, tars. 67 millim.

19. URUBITINGA ZONURA (Shaw).

Angostura. An old bird.

Long. al. 410, caud. 240, culm. $37\frac{1}{4}$, tars. 125 millim.

This species has not hitherto been noted from Venezuela.

20. ANTENOR UNICINCTUS (Temm.).

Angostura. An adult.

Long. al. 360, caud. 235, culm. $30\frac{1}{2}$, tars. 90 millim.

Agrees with a specimen from Chili in Mus. H. v. B., but has the breast much more mixed with fulvous, the under tail-coverts darker cream-colour, the abdomen more banded with white, and the tibia more uniform and darker castaneous.

This species has not previously been noticed in Venezuela.

21. HYPOTRIORCHIS FEMORALIS (Temm.).

Angostura. A young male in bad plumage.

22. CERCHNEIS SPARVERIUS ISABELLINUS (Swains.).

Angostura. ♂ and ♀ ad.

♂. Long. al. 175, caud. 118, culm. 13, tars. 34 millim.

♀. Long. al. 187, caud. 125, culm. $15\frac{1}{4}$, tars. 34 millim.

The male has the head unspotted dark grey, while the female possesses a large red spot on the hind part of the crown. The male has only a few black marks on the flanks; the black marks on the back and scapulars are not fewer than in an old male from Guatemala.

23. MILVAGO CHIMACHIMA (Vieill.).

Angostura. A young bird.

Long. al. 275, caud. 182, culm. $23\frac{1}{2}$, tars. 50 millim.

24. POLYBORUS AUDUBONI, Cass.

Angostura. An adult in faded plumage.

Long. al. 395, caud. 218, culm. 38, tars. 95 millim.

25. CATHARTES AURA PERNIGRA (Sharpe).

Angostura. Two skins, an old and a younger bird.

Long. al. 500–508, caud. 243–255, culm. $27\frac{1}{2}$–29, tars. 64 millim.

The shafts of the primaries are brown above, white beneath, the secondaries margined with greyish white. These birds agree generally with specimens from Santa Catharina, Brazil, but are somewhat blacker, have shorter wings, and the colour of the head seems to be of a more yellowish red. The base of the bill between the nostrils and the naked skin of the front is of a much clearer yellowish (not dark) red. But on the whole I am not quite satisfied as to the real distinctness of *C. pernigra*, Sharpe.

26. CATHARTES URUBITINGA, Pelzeln.

Angostura. An adult.

Long. al. 468, caud. 215, culm. 27, tars. 58 millim.

This is certainly quite an old bird; the naked head appears of a uniform yellowish or orange colour. On the sides of the neck and the occiput small lobes, or caruncles are disposed, a peculiarity which I do not believe ever occurs in true *C. aura*! The shafts of the primaries are yellowish white above and below.

This species was not previously known to occur in Venezuela.

27. Cathartes atratus (Bartr.).

Angostura. Four specimens, old and young.

Long. al. 395–420, caud. 170–180, culm. 25–28½, tars. 75–80 millim.

The very old bird has the skin of the head, especially on the hind neck, extremely corrugated and folded (just as represented in d'Orbigny's Voy. Am. mérid. Ois. pl. i. fig. 1), while the young one has it nearly smooth.

28. Ardea cocoi, Linn.

Angostura. A young bird.

Long. al. 448, caud. 180, culm. 130½, tars. 185 millim.

The dimensions are much smaller than those of my birds from Southern Brazil. Species new to the fauna of Venezuela.

29. Ardea candidissima, Gmel.

Angostura. One specimen lacking nuptial feathers of the neck and lower back.

Long. al. 252, caud. 90, culm. 85, tars. 93 millim.

Base of maxilla yellow; legs and feet greenish brown, not marked with yellow.

A specimen from Guiana in Mus. H. v. B., in full nuptial plumage, differs in being much smaller and in having the feet of a yellowish colour. I am not prepared to say whether these differences are sexual or otherwise.

30. Ardea sibilatrix, Temm.

Rio Apure. An old bird.

Long. al. 312, caud. 119, culm. 70½, tars. 90 millim.

Agrees with specimens from Rio Grande do Sul, Brazil (Mus. H. v. B.), but is of somewhat larger dimensions, especially the bill is longer and broader at base. The upper wing-coverts are more yellowish, not so much mixed with brownish, and the black stripes on them thinner and finer.

Venezuela is quite a new locality for this species, which hitherto was only known from Brazil and Paraguay.

31. Butorides cyanurus (Vieill.).

Angostura (one) and Rio Apure (two) ad. and vix ad.

Long. al. 179–185, caud. 65–68, culm. 62–65, tars. 52–54 millim.

Agrees in every respect with birds from Santa Catharina and Rio Grande do Sul, S. Brazil, but perhaps slightly larger.

Prof. Schlegel notes this species from Caracas (Mus. d. P.-B.).

32. Tigrisoma brasiliense (Linn.).

Rio Apure. Three adults, one young.

Long. al. 310–338, caud. 125–136, culm. 95–110, tars. 80–103 millim. (the young of the largest size).

It is, perhaps, rather difficult to distinguish young birds of *T. brasiliense* and *T. salmoni*. *T. salmoni* seems to have the bill always shorter, but there is much variation in this respect. I am rather doubtful about the correct determination of some immature birds from Eastern Ecuador, a locality where both species occur. *T. brasiliense* has not hitherto been recorded from Venezuela.

33. Nycticorax gardeni (Gmel.).

Angostura. An old bird, but lacking the long white nuptial neck-plumes, otherwise agreeing with a specimen from S. Paulo (Mus. H. v. B.), but with the bill somewhat longer and broader at base.

A species not previously noted from Venezuela.

34. Tantalus loculator, Linn.

Angostura. An adult, generally agreeing with a specimen from Rio Grande do Sul, S. Brazil (Mus. H. v. B.), but with bill and wings shorter.

Long. al. 475, caud. 168, culm. 207, tars. 200 millim.

A species not previously recorded from Venezuela.

35. Ortalis ruficauda, Jard.

Rio Apure. An adult bird.

Long. al. 243, caud. 270, culm. 30, tars. 73 millim.

Agrees with a specimen from Puerto Cabello (Mus. H. v. B.), but is of rather larger size, with much larger bill, and generally lighter colours, crissum lighter rufous-brown. I believe the Puerto-Cabello bird is not quite adult.

36. Opisthocomus cristatus (Lath.).

Angostura. An adult.

Long. al. 345, caud. 322, culm. 28, tars. 58 millim.

Agrees with a specimen from Yquitos, Upper Amazons, but wings, tail, and crest longer.

So far as I know, this bird has not hitherto been recorded from Venezuela.

37. Aramides cayennensis (Gmel.).

Angostura. A somewhat small and pale-coloured specimen, but otherwise agreeing with individuals from British Guiana and Panama.

Long. al. 182, caud. 64, culm. 47, tars. 65½ millim.

38. Aramus scolopaceus (Gmel.).

Angostura. One specimen.

Long. al. 315, caud. 130, culm. 107, tars. 115 millim.

Agrees with a specimen from Rio Grande do Sul, S. Brazil, while an individual from Santa Catharina is of much larger size and paler in coloration.

Species not previously known from Venezuela.

39. Eurypyga helias, Pall.

Angostura. One specimen.

Long. al. 210, caud. 155, culm. 54, tars. 55 millim.

E. helias is also new to the fauna of Venezuela.

40. Œdicnemus bistriatus (Wagl.).

Angostura. One specimen.

Long. al. 292, caud. 117, culm. 43, tars. 114 millim.

41. Parra jacana, Linn.

Angostura. Two ad., one juv.

Long. al. 120–133, caud. 40–43½, rostr. a rictu 27–33, tars. 54 millim.

These specimens agree with skins from Rio Grande do Sul, S. Brazil; the shade in the colour of the back is but slightly darker.

42. Vanellus cayennensis (Gmel.).

Angostura. Two specimens.

Long. al. 215–228, caud. 92–95, culm. 31¼–32, tars. 81–83 millim.

These birds differ from my skins from S. Brazil (Santa Catharina and Rio Grande do Sul) in possessing shorter crest-plumes. The bill is shorter, tarsus longer, the back more golden, uropygium darker.

43. Totanus melanoleucus (Gmel.).

Angostura. Two specimens.

Long. al. 186½–191, caud. 71–73, culm. 54–56½, tars. 62 millim.

This species has not previously been recorded from Venezuela.

XLV.—*Description of a new Species of the Genus* Picumnus *from Southern Brazil.* By Hans von Berlepsch.

Picumnus jheringi, sp. nov.

♂. Pileo anteriore obscure sanguineo (plumarum basibus nigris), posteriore *plumis longis pendulis* (cristam occipitis longam formantibus) nigris, maculis apicalibus albis instructis; plumis nasalibus sordide rufescenti-albis nigro variis; superciliis nigris, maculis apicalibus albescentibus præditis; auricularibus inferioribus brunneis nigro marginatis, superioribus nigro alboque striatis; nucha cum colli lateribus sordide albescentibus brunneo variis; dorso obscure brunneo, plumis ad discum obscurioribus, ad marginem pallidioribus; plumis mystacalibus et gulæ superioris nigris ad apices late albo marginatis; gula inferiore et jugulo pallide rufescentibus, plumis macula apicali brunneo-nigra instructis; corpore reliquo pallidius rufescenti-albo, maculis elongatis, vel potius striis, nigris signato; remigibus cum tectricibus alarum superioribus brunneo-nigris, nisi in primariis 3 exterioribus, pallide rufescente extus marginatis; rectricibus (ut rite) nigris, duabus mediis intus flavo-albis, duabus lateralibus, proximis vix, flavo-albo terminatis.

Long. tot. 102, al. 56½, caud. 35, culm. 11¾ millim.

Obs. Sp. a speciebus cognitis, plumis occipitis valde elongatis cristam pendulam formantibus, necnon dorso fere immaculato brunneo, et abdomine ochraceo distincte nigro striato, primo visu distinguenda, cetera *P. lepidoto* et *P. pygmæo* affinis.

Habitat in Prov. Rio Grande do Sul, Brasiliæ merid. circum Taquara do Mundo novo collegit Dr. H. v. Jhering. Specimen unicum typ. in Mus. H. v. Berlepsch asservatum.

The discovery of this interesting new species we owe to Dr. Hermann von Jhering, who resided several years in the colony Taquara do Mundo novo, in the northern part of the province of Rio Grande do Sul. Through the assiduity of this collector, I have received a great many skins from this locality representing about 220 species, and among them several of considerable rarity, such as *Cephalolepis loddigesi, Synallaxis cinerascens, S. ruticilla, Formicivora malura, Dryocopus galeatus,* and others.

Dr. v. Jhering is about to continue his researches in the southern part of the province, viz. in the neighbourhood of the city of Rio Grande. Wishing him every success, I am glad to name this new species after him, partly in acknowledgment of his successful researches, and partly in memory of our old friendship, dating from university times.

P. jheringi, as will be seen from the diagnosis, will hardly compare with any other species of *Picumnus,* standing alone in possessing long, hanging, black, white-tipped crest-feathers on the occiput. The species seems to be somewhat rare about Taquara, Dr. v. Jhering having only obtained one specimen, while he sent me a good series of another species, viz. *P. temmincki,* Lafr., which abounds there.

Muenden, June 1884.

XLVI.—*Notes on Birds from British Guiana.* Part III.*

By Osbert Salvin and F. DuCane Godman, FF.R.S.

(Plates XIII., XIV.)

In the last number of 'The Ibis' a letter from Mr. Henry Whitely was printed, dated "Roraima, Oct. 15, 1883," in which the writer gave a short account of his doings up to that date in the remote part of British Guiana he was then investigating. Towards the end of June last Mr. Whitely returned home, bringing with him his collection, which, as on previous occasions, he kindly submitted to us for examination. It contains specimens of upwards of 240 species, and includes all the birds discovered by Schomburgk in the higher districts investigated by him during his well-known expedition, the types of which have hitherto remained almost unique in the Berlin Museum. Now, owing to Mr. Whitely's enterprise, we have before us a good series of *Diglossa major*, *Setophaga castaneicapilla*, *Buarremon personatus*, *Campylopterus hyperythrus*, &c., besides a number of other birds not included in Schomburgk's lists. Of these latter we now describe eighteen species, all of which appear to us to be new, some of them being remarkable for their beauty and distinctness.

In a recent number of the 'Proceedings of the Royal Geographical Society' (vi. p. 552), Mr. Whitely has given a short account of his journey to Roraima, illustrated with some sketches of the wonderful mountains under which he was encamped for several months. In this paper will be found an account of the physical features of this district, which it is Mr. Whitely's intention of again visiting.

The collections formed by Mr. Whitely in British Guiana now include skins of between 400 and 500 species; and we hope shortly to draw up a list of the whole, and for this purpose we have retained in our collection representatives of all of them.

TURDUS RORAIMÆ.

Sordide olivaceus, capite undique, alis et cauda nigris, abdomine medio cinnamomeo, crisso fusco cinnamomeo marginato; rostro flavo, pedibus pallide corylinis: long. tota 9·5, alæ 4·9, caudæ 4·0, rostri a rictu 1·15, tarsi 1·3.

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* For Part I. see Ibis, 1882, pp. 76–84; Part II. Ibis, 1883, pp. 203–212.

♀ mari similis, sed gula nigro striata et rostro nigricante distinguenda.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Obs. T. olivatri ex Venezuela certe affinis, sed colore capitis nigro magis restricto et margine ejus postico male definito facile distinguendus.

An interesting Thrush, obtained in some numbers by Mr. Whitely at the foot of Roraima, at an altitude of from 5000 to 6000 feet. It is allied to the Venezuelan *T. olivater*, and may be distinguished from it by the black of the head being more restricted and gradually passing into the colour of the rest of the body, there being no sharp definition between the two colours, as in the allied bird.

CHLOROPHONIA RORAIMÆ.

Clare viridis; oculorum ambitu, cervice postica et dorso postico toto læte cæruleis, dorso antico quoque cæruleo, sed viridi intermixto; fronte et abdomine toto flavis; rostro nigro, pedibus corylinis: long. tota 4·2, alæ 2·5, caudæ 1·5, rostri a rictu 0·45, tarsi 0·5.

♀ viridis; oculorum ambitu, cervice postica et uropygio tantum cæruleis, abdomine vix flavo tincto.

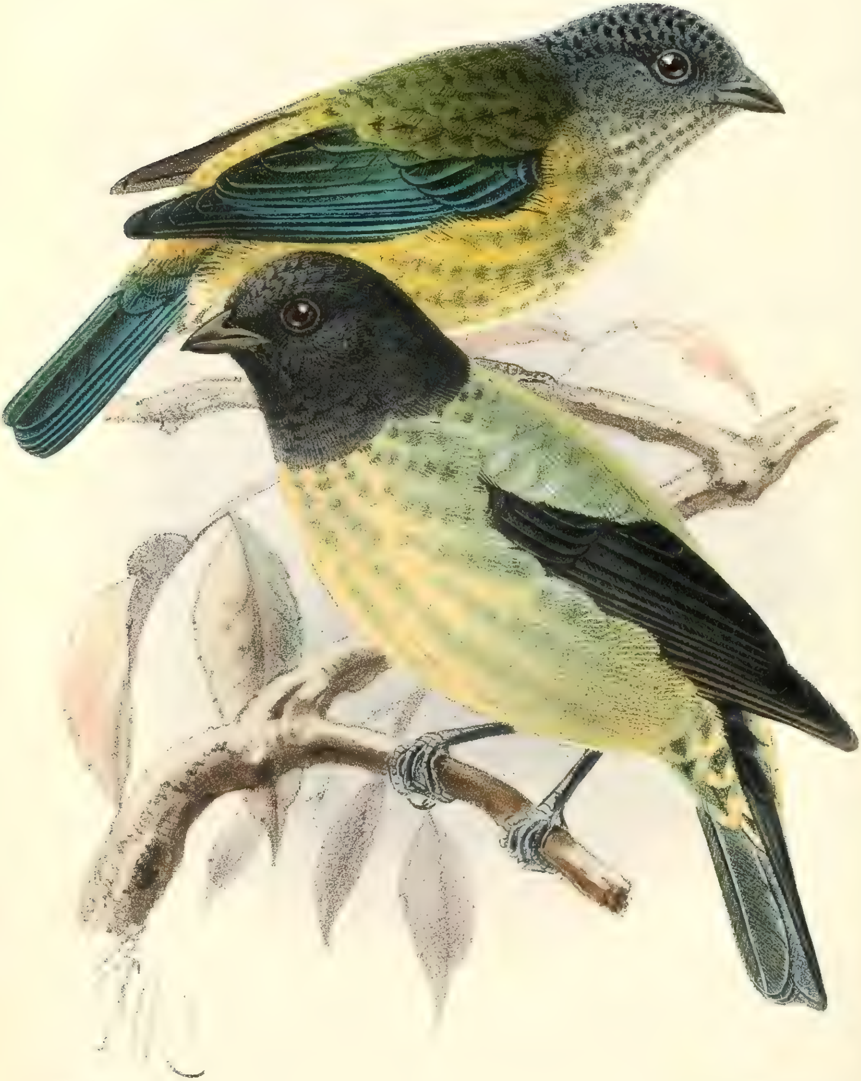
Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Obs. C. frontali ex Venezuela affinis, sed dorso antico cæruleo tincto diversa.

This species has the whole back as blue as in *C. viridis* and *C. longipennis*, whilst the nape is more clearly of that colour. On the other hand the forehead is yellow, as in *C. frontalis*, which, again, has a green back. *C. roraimæ* thus forms a link between *C. viridis* and *C. frontalis*. This fact, however, does not admit of employing the fashionable trinomial nomenclature to these birds, inasmuch as their distribution in isolated mountain-chains renders it highly improbable that any thing like complete fusion exists between them.

Ibis. 1884. Pl. XII.



J. G. Keulemans lith. Hanhart imp.

CALLISTE WHITELYI, n. sp.

CALLISTE WHITELYI. (Plate XIII.)

Pallide schistacea, opalino tincta, capite undique, alis et cauda nigris, subalaribus albis; rostro et pedibus nigris: long. tota 5·3, alæ 2·8, caudæ 2·1, rostri a rictu 0·5, tarsi 0·6.

♀ supra virescens, capite summo obscure fusco, alis et cauda nigricantibus extus cæruleo limbatis, subtus cinerascens, abdomine medio albicantiore albido striato, hypochondriis oleagineis, subalaribus albis.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Obs. C. cyanopteræ, ex Venezuela, affinis, sed alis maris nigris nec cyaneo limbatis facile distinguenda.

Mr. Whitely's collection contains several specimens of this fine new *Calliste,* all of them shot in the forests on the slopes of Roraima, at an altitude of from 5000 to 6000 feet. As in the case of the two preceding species, its alliance is with a well-known Venezuelan *Calliste,* from which, however, it is obviously distinct.

PHONIPARA PHÆOPTILA.

Omnino fuliginosa, abdomine imo vix pallidiore, crisso albido striato; rostro nigro, mandibulæ basi pallida, pedibus corylinis: long. tota 4·6, alæ 2·3, caudæ 2·0, rostri a rictu 0·45, tarsi 0·6.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Obs. P. bicolori affinis, sed dorso fuliginoso nec olivaceo differt.

Mr. Whitely's single specimen of this species was obtained near Roraima, at an elevation of about 3500 feet above the sea. It seems quite distinct from all the species of *Phonipara* hitherto described.

EUSCARTHMUS RUSSATUS.

Supra virescens, capite toto summo et nucha plumbeo-nigris, fronte capite lateribus et gutture toto læte cinnamomeis, alis et cauda nigris extus viride limbatis, illis quoque fasciis duabus cinnamomeo-viridibus ornatis; abdomine medio albido, hypochondriis plumbescenti-viridibus;

rostro nigro, pedibus corylinis: long. tota 3·6, alæ 1·9, caudæ 1·5, rostri a rictu 0·6, tarsi 0·75.

♀ mari similis.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Obs. Ab *E. gulari* capite summo plumbeo-nigro, fronte et auricularibus cinnamomeis et gutture saturatiore cinnamomeo facile distinguendus.

Mr. Whitely's specimens of this species were obtained at an elevation of 6000 above the sea, in the forest-clad slopes leading to the cliffs of Roraima. The bird is certainly nearly allied to *E. gularis*, of which we have specimens both from Brazil and also from Bolivia. The colours of the plumage are similarly distributed, but are all much deeper in tint.

LEPTOPOGON NIGRIFRONS.

Supra olivaceus, capite summo cinereo, fronte medialiter nigra, antice et postice albo limbata, superciliis et loris quoque albis; alis et cauda fusco-nigris olivaceo limbatis, secundariis internis et tectricibus alarum maculis flavis terminatis, subtus cinereo-albus, hypochondriis olivascentibus; rostro nigro, pedibus corylinis: long. tota 5·2, alæ 2·45, caudæ 2·6, rostri a rictu 0·6, tarsi 0·7.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Mr. Whitely's collection contains only a single male specimen of this peculiar bird, which he shot at an elevation of 5000 feet above the sea, on the slopes of Roraima.

In coloration *L. nigrifrons* has no near allies, the black band across the forehead being quite peculiar. The long rictal bristles and the rather straight narrow bill and comparatively long tail seem to indicate its place in the genus *Leptopogon*, but we are in some doubt on this point.

ELAINEA OLIVINA.

Supra saturate oleaginea, capite obscuriore, crista verticali celata alba; alis et cauda nigricanti-fuscis, secundariis extus olivaceo-albido limbatis, tectricibus albido bifasciatis; loris et corpore subtus olivaceo-flavidis, pectore et hypochondriis paulo obscurioribus, gula albicantiore;

rostro obscure fusco, mandibulæ basi albicante; pedibus saturate corylinis: long. tota 5·6, alæ 2·85, caudæ 2·7, rostri a rictu 0·6, tarsi 0·7.

♀ mari similis.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

This is apparently a very distinct species of *Elainea*, belonging to the group with the white concealed vertical patch. In size it is about the same as *E. albiceps*, but is of a much brighter olive-yellow beneath.

Mr. Whitely found this species on the slopes of Roraima, at elevations between 3500 and 6000 feet.

CHLOROPIPO UNIFORMIS.

Saturate olivaceus, subtus paulo sordidior, gula cinereo vix induta, abdomine medio pallidiore; rostro et pedibus plumbeo-nigris: long. tota 5·4, alæ 3·1, caudæ 2·4, rostri a rictu 0·6, tarsi 0·6.

♀ mari omnino similis.

Hab. in monte "Roraima" dicto, Guiana Brit.

This rather singular bird seems best placed in the genus *Chloropipo*, from the type of which, *C. flavicapilla*, it differs in having a rather longer tail and in the base of the culmen of the bill being rather more flattened. In its general coloration *C. uniformis* might easily be mistaken for the female of *Xenopipo atronitens*; but the absence of the slightly metallic gloss on the upper plumage of that bird, and the maxilla being dark to the base, are characters which at once distinguish it on closer inspection.

Mr. Whitely obtained a good many specimens of both sexes at elevations varying from 3500 to 6500 feet, and dissected examples show that there is no material difference in the plumage of the males and females.

PIPRA IRACUNDA.

P. rubricapillæ similis, sed capite saturatiore rubro et plumis capitis postici valde elongatis, fere ut in *P. cornuta*: long. tota 4·4, alæ 2·6, caudæ 1·5, rostri a rictu 0·6, tarsi 0·7.

Hab. in monte "Roraima" dicto, Guiana Brit.

This pretty *Pipra* has the red thighs of *P. rubricapilla* and a black throat, as in that species, but the red colour of the head is not only deeper in tint, but extends much further over the nape, almost as a crest. In this latter character it somewhat resembles *P. cornuta,* from which bird its black throat at once distinguishes it.

Mr. Whitely only obtained a single male specimen of *P. iracunda,* on the slopes of Roraima, at an elevation of 3500 feet.

PACHYRHAMPHUS GRISEIGULARIS.

Pachyrhamphus griseigularis, Salv. & Godm. Ibis, 1883, p. 208, ♀.

In our last paper on Mr. Whitely's birds we ventured to describe a female specimen of a *Pachyrhamphus* under this name. In the present collection we are glad to find a single male, which confirms the distinctness of the species, and which we describe as follows:—

Supra olivaceus, capite summo nigro, genis olivaceis, loris albis; alis et cauda nigris, secundariis internis et tectricibus illarum omnibus sordide olivaceo marginatis; subtus gula et pectore griseis albo striatis, ventre medio et crisso albis; rostro plumbeo-nigro, tomiis albidis; pedibus plumbeis: long. tota 5·4, alæ 3, caudæ 2·2, rostri a rictu 0·9, tarsi 0·8.

Obs. A *P. viridi* ex Bahia differt cervice postica olivacea, pectore griseo nec flavo, et tectricibus alarum et secundariis internis nigris nec olivaceis.

From this description it will be at once seen that *P. griseigularis* is a very well-defined species. The male was shot by Mr. Whitely at an elevation of 3500 feet, on the slopes of Roraima.

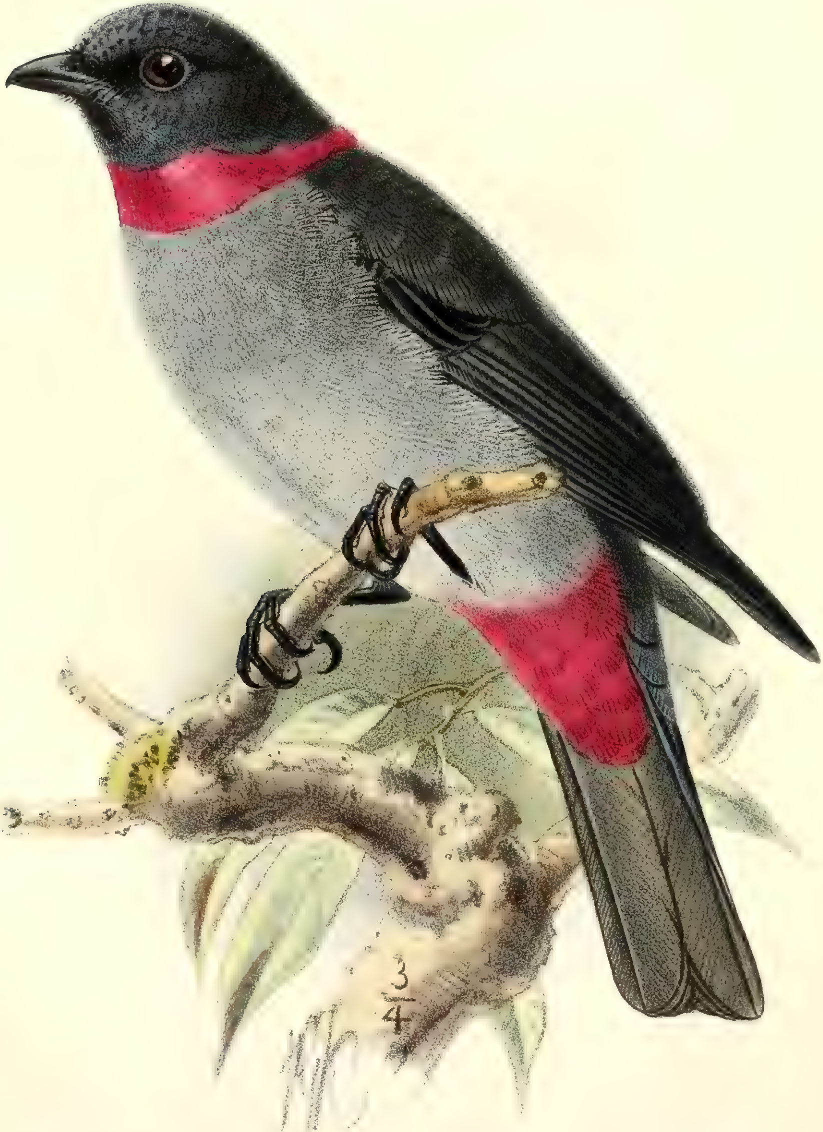
LATHRIA STREPTOPHORA. (Plate XIV.)

Cinereus, subtus paulo dilutior, torque cervicali antice late postice anguste, lætissime rosaceo, crisso quoque ejusdem coloris; rostro et pedibus nigris: long. tota 9·0, alæ 4·8, caudæ 3·7, rostri a rictu 0·95, tarsi 0·8.

♀ ignota.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.



J. G. Keulemans lith.

Hanhart imp.

LATHRIA STREPTOPHORA

This species is about the size of *L. cineracea*, but the beautiful rosy ring round the neck and the under tail-coverts of the same colour at once distinguish it at a glance from all the usually plain-coloured members of the genus *Lathria*.

Of *L. streptophora* Mr. Whitely only obtained two male specimens, at an elevation of about 5000 feet. He says he saw the female, but failed to secure one.

PIPREOLA WHITELYI.

♂ adhuc ignotus.

♀ supra olivacea, fronte capitis lateribus et torque cervicali postico anguste flavido lavatis; subtus alba flavido tincta et undique olivaceo guttata; crisso flavido; rostro rubicundo, pedibus corylinis: long. tota 6·7, alæ 3·6, caudæ 2·7, rostri a rictu 0·8, tarsi 0·85.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

The only specimen of this bird sent by Mr. Whitely is, unfortunately, a female, and we are unable to form any idea as to the coloration of the male, which doubtless is a brightly plumaged bird, as is usual in the members of this genus. As the secondaries are without terminal spots, we conclude that this Guiana bird belongs to the section of the genus containing *P. jucunda* and *P. elegans* (see Sclater, Ibis, 1878, p. 166). We venture to describe this female, as it bears no near resemblance to any hitherto known species, but we wait with interest the arrival of the male, which can hardly fail to be a beautiful bird.

SYNALLAXIS DEMISSA.

Supra ochraceo-brunnea, capite summo, tectricibus alarum et cauda cinnamomeis, fronte et corpore subtus cinerascentibus, hoc medialiter albicantiore, plaga gulari nigra nulla; rostro et pedibus fuscis: long. tota 6·0, alæ 2·4, caudæ 3·0, rostri a rictu 0·6, tarsi 0·7.

♀ mari similis.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Obs. S. frontali proxima, sed plaga celata gulari nigra nulla facile dignoscenda.

Several specimens, obtained as high as 6000 feet on the slopes of Roraima.

SYNALLAXIS ADUSTA.

Supra intense brunnea quasi adusta, capite obscuriore, alis fusco-nigris extus brunneis; subtus gula alba, pectore et abdomine medio albis fusco striolatis, hypochondriis brunneo-fuscescentibus; rostro fusco, mandibulæ basi pallida, pedibus nigricantibus: long. tota 5·5, alæ 2·4, caudæ 2·5, rostri a rictu 0·7, tarsi 0·9.

♀ mari similis.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Obs. *S. læmostictæ* forsan affinis, sed gula alba nec striata facile distinguenda.

This bird was obtained by Mr. Whitely, at an elevation of 6000 feet, on the slopes of Roraima. The species seems very distinct, though allied to *S. læmosticta* and *S. terrestris*.

PHILYDOR ALBIGULARIS.

Brunneus, subtus dilutior, capite paulo obscuriore, uropygio, cauda et subalaribus intense cinnamomeis, superciliis elongatis et gula tota lactescenti-albidis; rostro et pedibus obscure corylinis, illius mandibulæ basi pallida: long. tota 6·6, alæ 3·2, caudæ 3·0, rostri a rictu 0·9, tarsi 0·9.

♀ mari similis.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

The pale, nearly white, throat, contrasting with the colour of the rest of the under plumage, distinguishes this species from all with which we are acquainted.

Several specimens are in Mr. Whitely's collection, obtained at an elevation of from 5000 to 6000 feet, on the slopes of Roraima.

THAMNOPHILUS INSIGNIS.

Supra niger, cervice postica et dorso medio albo vix celato ornatis, alis medialiter extus albo limbatis, tectricibus alarum et supracaudalibus albo terminatis, secundariis internis et scapularibus extus albo late marginatis, cauda præter rectrices duas medias albo terminata, duabus utrinque extimis quoque macula alba extus medialiter ornatis; subtus obscure cinereis, gutture paulo saturatiore; crisso albo terminato; rostro et pedibus nigris: long. tota 6·6, alæ 0·3, caudæ rectr. med. 2·7, lat. 2·0, rostri a rictu 0·8, tarsi 0·9.

♀ mari similis, pileo antico albo intermixto, postico læte cinnamomeo-brunneo distinguenda.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Of this beautiful *Thamnophilus* Mr. Whitely obtained several specimens, at an elevation of about 5000 feet, on the slopes of Roraima. The species is quite distinct from any known to us, the sexual difference in the colouring of the head being peculiar.

GRALLARIA SIMPLEX.

G. brevicaudæ certe affinis et supra ejusdem coloris, subtus pectore unicolore griseo haud striato et hypochondriis griseis differt: long. tota 5·5, alæ 3·2, caudæ 1·7, rostri a rictu 0·9, tarsi 1·7.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

This species at first sight recalls *G. brevicauda,* a lowland bird, the place of which it seems to take in the higher mountains. The plain ash-coloured chest at once distinguishes it.

Mr. Whitely secured a small series of this *Grallaria,* at an elevation of about 5000 feet, on the slopes of Roraima.

PETASOPHORA GERMANA.

P. anai affinis et ejusdem staturæ, sed gula multo magis cærulea, gutture quoque toto cærulescentiore et fronte cæruleo suffusa distinguenda.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mr. Whitely obtained a pair of this species in the neighbourhood of Roraima, the male at an elevation of 5000 feet, the female at 6000 feet. Though the difference between the present bird and *P. anais* of the Andes is not great, we feel justified in separating them, the ranges of the two being doubtless broken by the low-lying lands of the Orinoco valley. It is, no doubt, this species which Schomburgk mentions in his list of Guiana birds ('Reise in Guiana,' iii. p. 707).

AMAZILIA CUPREICAUDA.

Capite summo et corpore toto subtus splendide virescentibus, dorso cupreo tincto, tectricibus supracaudalibus et cauda saturate cinnamomeis cupreo lavatis, plaga hypochondriaca et tibiis niveis, crisso pure cinnamomeo immaculato; rostri maxilla fusca, mandibulæ bitriente basali pallida: long. tota 3·5, alæ 2·0, caudæ 1·15, rostri a rictu 0·8.

♀ mari similis, coloribus minus vividis.

Hab. in monte "Roraima" dicto, Guiana Brit.

Mus. nostr.

Obs. *A. viridiventri* similis, sed cauda cupreo-cinnamomea nec violacea, crisso cinnamomeo, cauda minus furcata &c. distinguenda.

This species, of which Mr. Whitely obtained a good series of examples, seems certainly distinct from *A. viridiventris* of Colombia, and the characters pointed out above seem to stand with great certainty. In Venezuela there is also a species of this genus, which is also allied to *A. viridiventris*, and of which we have one indifferent specimen. Whether it is really to be distinguished from the bird we now describe remains to be determined on receipt of more examples in better condition. Anyhow, we are not aware that the Venezuelan bird has a name strictly applicable to it.

XLVII.—*Notices of recent Ornithological Publications.*

(Continued from p. 348.)

71. '*The Auk.*'

['The Auk,' a Quarterly Journal of Ornithology. Continuation of the 'Bulletin of the Nuttall Ornithological Club.' Vol. I. Nos. 2 & 3, April and July 1884. Boston, Mass.]

Besides receiving the numbers of 'The Auk' complete, we have been favoured with separate copies of several of the articles by Mr. Lawrence and Mr. Stejneger. To give an abstract of the contents of these two very interesting numbers is, we think, not necessary. Readers of 'The Ibis' must read 'The Auk' also. But we will offer a few remarks on one or two points.

We must confess that Mr. Stejneger makes an effective reply (p. 118) to our argument (Ibis, 1883, p. 116) about *Plectrophanes*, which term, it must be conceded, is strictly a mere equivalent of *Calcarius*. We had not noticed that Meyer, when he first instituted *Plectrophanes*, in 1815, continued to place the Snow-Bunting under *Emberiza*. The "strictly correct" generic term for the Snow-Bunting is consequently *Plectrophenax*. But must we always do what is "strictly correct"? Our sense revolts against the wholesale changes of familiar names which Mr. Stejneger seems to take a special delight in bringing forward.

Mr. Lawrence describes (p. 180) a new Pigeon from the island of Granada, N.S., as *Engyptila wellsi*.

In No. 3 Mr. Stejneger describes a new Gull, *Larus schistisagus* [? *L. affinis*], from the Commander Islands (p. 231); and Mr. Henshaw another new Gull, *L. nelsoni*, from Alaska.

72. *R. Blasius on the Ornithological Congress at Vienna.*

[Erster internationaler Ornithologen-Congress in Wien. Von Dr. R. Blasius. Monats. d. deutsch. Vereins zum Schutze d. Vogelwelt, 1884, No. 5.]

Dr. R. Blasius gives an account of the Ornithological Congress at Vienna in April last, which seems to have been attended by representatives of almost all civilized countries except England and America. The President was the Marquis v. Bellegarde, the Vice-President Dr. Gustav Radde of Tiflis. Three Sections were formed:—(1) For the consideration of an International Law for the Preservation of Birds; (2) For the question of the Origin of the Domestic Fowl; (3) For the establishment of Stations for the Observation of Birds over the whole world. The proceedings of each Section are shortly given.

73. *W. Blasius's second Paper on the Great Auk.*

[Zur Geschichte der Ueberreste von *Alca impennis*, Linn. Von Prof. Dr. Wilh. Blasius. J. f. O. 1884, p. 58.]

We noticed Prof. Blasius's first paper on this subject in our April number (p. 204). In this second contribution he gives further details respecting this interesting extinct species, and increases the number of specimens known to exist from 74 to 76.

74. *Cope on the Zoological Position of Texas.*

[On the Zoological Position of Texas. By Edward D. Cope. Bull. U.S. Nat. Mus., No. 17.]

Mr. Cope discusses Texas with regard to the question of the point of junction of the Nearctic and Neotropical faunas. As we all know, the tableland of Mexico is populated by an animal life which belongs to the north and differs essentially from that of the coast-region on each side. The genera of South America terminate their range at various points along the coast-region, but on the Atlantic slope "enough of them remain at Matamoras, at the mouth of the Rio Grande, to show that that point is not far from the northern boundary of the Neotropical Realm." On the other hand, various northern genera run south over the tableland as far as the City of Mexico.

Mr. Cope discusses only the Mammals, Reptiles, and Batrachians of Texas; but his essay should not the less be read by ornithologists. His conclusion is that Texas must be placed within the Nearctic Region, a result with which we believe students of its avifauna will also agree.

75. *Coues and Prentiss on the Avifauna of Columbia.*

[Avifauna Columbiana; being a List of Birds ascertained to inhabit the district of Columbia, with the times of arrival and departure of such as are non-residents, and brief notices of habits &c. Second Edition. By Elliott Coues, M.D., Ph.D., and D. Webster Prentiss, A.M., M.D. Bull. U.S. Nat. Mus., No. 26, 1883.]

The title of this list fully explains its contents. The species as yet recognized as occurring within the district of Columbia are 248 in number, of which, as shown in the "Recapitulation," 47 are "permanent residents," 46 "winter visitants," 66 "summer visitants," 49 "spring and autumn migrants," and 40 "accidental or very rare visitors." The game-laws of the district are subjoined. The chapter on the Location and Topography of the District of Columbia contains an account of "Rail-shooting on the Anaconda-River marshes," which, though not strictly scientific, will interest many of our readers.

76. *Dalgleish on Birds and Eggs from Central Uruguay.*

[Notes on a Second Collection of Birds and Eggs from Central Uruguay. By John J. Dalgleish. Proc. Roy. Phys. Soc. Edinb. vol. viii. p. 77.]

Mr. Dalgleish's correspondent in the Banda Oriental continues his interesting field-notes on the birds of Central Uruguay, and their nests and eggs. Fifteen species are included in the present contribution.

77. *Finsch on Birds from the South Pacific.*

[Ueber Vögel der Südsee. Auf Grund eigener Beobachtungen und Sammlungen mitgetheilt von Dr. O. Finsch, Ehrenmitglied des Ornith. Vereines in Wien. Wien: 1884. 56 pp.]

The object of this essay was, we believe, to give an account of the collection of birds obtained by the author during his travels in the Pacific, and exhibited at the recent Ornithological Congress at Vienna. The collection is divided into five categories:—(1) New Britain, (2) New Guinea, (3) Cape York and Torres Straits, (4) New Zealand, and (5) Micronesia. General remarks are prefaced about the five different localities, and special notes appended to the name of each species.

78. *Giraldes on the Birds of Portugal.*

[Questões de Philosophia Natural por Albino Giraldes.—III. Catalogo das Aves de Portugal existentes actualmente no museu de Coimbra, 1878. 8vo. Coimbra: 1879.]

The species enumerated amount to 205, most of them known to occur in other portions of the Iberian Peninsula. Provided the identifications are correct, the most interesting for distribution are *Picus medius* and *Loxia pityopsittacus*, the latter new to the Peninsula. About 40 species which may be expected to be found in Portugal are as yet unrepresented in the Coimbra Museum.

79. *Gurney's List of the Diurnal Birds of Prey.*

[A List of the Diurnal Birds of Prey, with references and annotations; also a record of specimens preserved in the Norfolk and Norwich Museum. By John Henry Gurney. 8vo. London: 1884.]

This list was originally intended to serve as an Index to Mr. Gurney's series of critical articles which have appeared in this Journal on Mr. Sharpe's 'Catalogue of the Diurnal Birds of Prey.' With this the author subsequently determined to combine a list of all the species and subspecies of Birds of Prey known to him, and to add a few of the most necessary references, together with a statement of the number of specimens of each species in the Norwich Museum. This rich collection, Mr. Gurney tells us, contains 2895 specimens representing 383 species and subspecies of Accipitres, and 1009 specimens representing 171 species of Striges.

To his most useful list Mr. Gurney adds a series of 15 appendices (A to O), containing essays on various moot points in the history of the Accipitres. In one of these a new Kestrel (*Tinnunculus arthuri*) from Mombasa is described for the first time.

80. *Harvie-Brown on Records of Migration.*

[On the Occurrence of the Little Gull (*Larus minutus*) in the Island of North Uist; with Remarks on the Objects of the International Ornithologists' Congress at Vienna, and on Uniformity of Method in recording Rare Species in future. By John A. Harvie-Brown. Proc. Roy. Phys. Soc. Edinb. vol. viii. p. 105.

Method in recording Observations. By John A. Harvie-Brown. Zool. 1884, p. 60.]

In our last number (p. 349) we printed a letter from our esteemed fellow-worker bearing upon a concise and simple method of recording ornithological observations, his text being then the occurrence of the Black Redstart (*Ruticilla titys*) at Pentland Skerries. In the present papers he has selected as his theme the Little Gull (*Larus minutus*), which has been killed in North Uist—apparently the most westerly locality as yet recorded in Europe.

81. *Martorelli on the Fauna of Sardinia.*

[Osservazioni sui Mammiferi ed Uccelli fatte in Sardegna dal Dott. Giacinto Martorelli. Small folio. Pistoia: 1884.]

In this useful addition to our knowledge of the Birds of the island of Sardinia we have a coloured illustration of an immature example of a Falcon which has been pronounced by Mr. J. H. Gurney to be *Falco punicus* (*cf.* Salvadori, *infrà*, p. 462). There is also a coloured plate of a prettily placed nest of the Grey Flycatcher (*Butalis grisola*), overhung with the maidenhair fern, and an outline illustration of heads and feet of various groups. We cannot always agree with the learned Doctor in the orthography of his scientific names, such as *Haegilites* for *Ægialitis*.

82. *Menzbier on the Avifauna of Central Russia.*

[Revue Comparative de la Faune Ornithologique des Gouvernements de Moscou et de Toula. Par Michel Menzbier. Bull. Soc. Imp. Nat. Moscou, lvi. pp. 202–219, lviii. pp. 109–144.]

The writer, who had already published (Bull. Soc. Imp. Nat. Moscou, 1879) a paper on the Birds of the Government of Toula, which is situated nearly due south of that of Moscow, now gives a columnar list of the 266 species found in both these districts. This is followed by a catalogue of 259 species obtained between the Volga and the Oka, with very interesting remarks upon their geographical distribution.

83. *Menzbier on the Extinction of Species through Crossing.*

[Conférences de la Société zoologique de France.—Rôle du Croisement dans l'extinction des Espèces. Par M. Michel Menzbier. Revue Scient. sér. 3, 1884, p. 513.]

The study of the group of Blue Tits led the author to the conclusion that *Cyanistes pleskei* and *C. flavipectus* are old forms, which are being bred-out by crossing with *C. cyanus* and the intermediate forms; and he goes on to consider the question with relation to *Corvus corone* and *C. cornix*, *Buteo vulgaris* of Western and *B. vulpinus* of Eastern Europe, *Falco eleonoræ* and *F. arcadicus*, the members of the genus *Cyanecula*, the Nuthatches, and many other birds belonging to the above and other families. The three ways in which these crossings influence the colour of the plumage is only briefly touched upon, and this subject is reserved for future investigation.

84. *Meyer on Birds, Nests, and Eggs from the East Indies.*

[Ueber neue und ungenügend bekannte Vögel, Nester und Eier aus dem Ostindischen Archipel im königl. zoologischen Museum zu Dresden. Dem I. internationalen Ornithologen-Congress in Wien (7-14 April, 1884) gewidmet von A. B. Meyer. Sitzungsb. u. Abhandl. d. Gesell. Isis, Dresden, 1884, Abhand. i.]

This is an important memoir. After an introduction, in which he speaks of the birds of the Sangi Islands (68 species known, of which 20 are peculiar) and of the little-known islands of Kisser, Letti, Dammar, Wetter, Babbar, as well as of additional species from the Timor-Laut group, Buru, and Sumatra, Dr. Meyer treats of 153 species of birds in the Dresden Museum in systematic order. Amongst these the following new species and subspecies are described, and others doubtfully new are mentioned besides:—

Urospizias approximans halmaheræ, ex Halmahera.
Spilornis asturinus, ex loc. ign.
Geoffroyus timorlaoensis, ex inss. Tenimber.
Trichoglossus meyeri bonthainensis, ex Celebes.
Merops ornatus sumbaensis, ex Sumba.
Caprimulgus faberi, ex Sumatra.
Monarcha inornatus kisserensis, ex Kisser.
M. geelvinkianus, ex Mysore et Jobi.
M. fuscescens, ex Jamna (ins. Papuana).

M. pileatus buruensis, ex Buru.
Pœcilodryas minor, ex Nov. Guinea et Salawatti.
Gerygone fulvescens, ex Babbar.
Graculus lettiensis, ex Letti.
Lalage riedelii, ex Kisser.
L. timoriensis celebensis, ex Celebes.
Artamus musschenbroeki, ex inss. Tenimber.
Rhectes rubiensis, ex Nov. Guinea.
Pachycephala kebirensis, ex Babbar.
P. riedelii, ex Timor-Laut.
P. sharpei, ex Babbar.
Dicæum salvadorii, ex Babbar.
Philemon kisserensis, ex Kisser.
P. timorlaoensis, ex Timor-Laut.
Calornis circumscripta, ex Timor-Laut.
Ptilopus flavo-virescens, ex Timor-Laut.
Carpophaga pinon rubiensis, ex Nov. Guinea.

Many important remarks are given on other species. The occurrence of a Penguin (*Eudyptes chrysocome*) on the coast of Java, near Batavia, is recorded. As regards Dr. Meyer's supposed new species from Timor-Laut, Mr. H. O. Forbes's remarks (P. Z. S. 1884, p. 425) should be consulted.

85. *Oustalet on the Collections of M. E. Chantre.*

[Note sur les Collections rapportées par M. E. Chantre de son Voyage dans le Caucase et en Orient. Par M. E. Oustalet. Ann. Sc. Nat., Zool. xiii. Art. no. 7.]

M. Chantre's collection of 200 birds, referable to 90 species, was made in the Caucasus and in other parts of Western Asia. A list of the localities of 56 species of the latter category is given. Notes are added on the species of *Caccabis,* on *Ibis comata,* and on the Darter of Antioch, which M. Oustalet considers a new species (*Plotus chantrei*), more nearly allied to *P. melanogaster* than to *P. levaillanti.* Canon Tristram has referred this bird to *P. levaillanti* (P. Z. S. 1881, p. 826, and 'Fauna and Flora of Palestine,' p. 108, pl. xiii.).

86. *Oustalet on the Architecture of Birds.*

[L'Architecture des Oiseaux. Conférence faite à la Sorbonne, le 10 Mars 1883, par M. E. Oustalet. Extr. Bull. Assoc. Scient. France, Nos. 159–162. 42 pp.]

An essay on the always interesting subject of Birds' nests and nesting-habits, which we commend to our readers' attention.

87. *Oustalet on Birds from New Guinea.*

[Note sur quelques Oiseaux de la Nouvelle-Guinée. Par M. E. Oustalet. Ann. Sc. Nat., Zool. sér. 6, xiii.]

M. Oustalet describes the adult male plumage of his *Cyclopsittacus salvadorii* (Bull. Assoc. Sc. France, sér. 2, i. no. 11) from the N.E. coast of New Guinea, and speaks also of his *Drepanornis bruijnii.*

88–95. *Ridgway on American Birds.*

[88. Descriptions of some new North-American Birds. Proc. Biol. Soc. Washington, vol. ii. p. 89.

89. Description of a new American Kingfisher. *Tom. cit.* p. 95.

90. Note on *Psaltriparus grindæ,* Belding. *Tom. cit.* p. 96.

91. Note on the Generic Name *Calodromas. Tom. cit.* p. 97.

92. A Review of the American Crossbills (*Loxia*) of the *L. curvirostra* type. *Tom. cit.* p. 101.

93. Note on the *Anas hyperboreus,* Pall., and *Anser albatus,* Cassin. *Tom. cit.* p. 107.

94. Remarks on the Type Specimens of *Muscicapa fulvifrons,* Giraud, and *Mitrephorus pallescens,* Coues. *Tom. cit.* p. 108.

95. Note regarding the earliest Name for *Carpodacus hæmorrhous* (Wagler). *Tom. cit.* p. 110.]

In No. 88 the new subspecies described are :—*Parus atricapillus turneri,* from Alaska; *Psaltriparus minimus californicus,* from California; *Colaptes mexicanus saturatior,* from Washington Territory; *Myiarchus mexicanus magister,* from Western Mexico; *M. lawrencii olivascens,* from Tehuantepec; *Pediœcetes phasianellus campestris,* from Montana and States east of the Rocky Mountains; *Lophortyx californicus brunnescens,* from Northern California; and *Phalacrocorax dilophus albociliatus,* from the South-Pacific coast of the United States. In No. 89 Mr. Ridgway separates *Ceryle superciliosa strictoptera,* from Yucatan, as a new subspecies; in No. 90 he corrects his description of *Psaltriparus grindæ* (Pr. U.S. Nat. Mus. vi. p. 155) as compared with *P. melanotus.* In No. 91 it is proposed to change the generic term *Calodromas* (which has been previously used in Coleoptera) to *Calopezus.* In paper 92 a new subspecies from the western mountain-ranges of the U.S., in winter not uncommon in the eastern U.S., is described as *Loxia curvirostra bendirei.* Remarks are given on the other subspecies of the same group, amongst which is included *L. pityopsittacus*! But how can *L. pityopsittacus* be a subspecies, not having a distinct geographical distribution? In No. 93 Mr. Ridgway shows that *Anser albatus* of Cassin = *A. hyperboreus,* Pallas, and proposes to call the larger race (which Cassin mistook for the true *A. hyperboreus*) *Chen* (or *Anser*) *hyperboreus nivalis* (Forst.), it being apparently *Anas nivalis* of Forster. In No. 94 Mr. Ridgway considers the two birds named in the title and *Empidonax rubicundus,* Cab., to be three geographical races, of which *E. pallescens* is from the western and *E. fulvifrons* from the eastern side of the Rocky Mountains, while *E. rubicundus* is from Southern Mexico. In No. 95 D'Aubenton's Pl. Enl. 386. fig. 1 is stated to represent the Mexican House-Finch (*Carpodacus hæmorrhous*), which should therefore be called *C. mexicanus,* being the *Fringilla mexicana,* Müller, and *Emberiza mexicana,* Bodd.

96. *Salvadori's List of his Works.*

[Elenco degli Scritti di Tommaso Salvadori. 1863–1884.]

The original contributions and works of our valued Foreign Member during the last twenty-one years are nearly 150 in number; and to these may be added four important translations of such authors as Van der Hoeven, Pokorny, A. E. Brehm, and Paul Bert.

97. *Salvadori on a Falcon new to Italy.*

[Intorno ad una Specie di Falco nuova per la Fauna Italiana, Nota di Tommaso Salvadori. Atti d. R. Accad. d. Scienze d. Torino. Vol. xix. p. 343.]

This Falcon is the bird figured by Dr. Martorelli, shot near Sassari, Sardinia, in June 1883. It was sent to Mr. J. H. Gurney for his opinion, and was pronounced to be *Falco punicus*, Levaillant. Dr. Salvadori discusses the intricate question of the synonymy of this species, so frequently confounded with its congeners.

98. *Saunders's Edition of Yarrell's 'Birds.'*

[A History of British Birds. By the late William Yarrell, V.P.L.S., F.Z.S. Fourth Edition. Revised to the end of the Second Volume by Alfred Newton, M.A., F.R.S.; continued by Howard Saunders, F.L.S., F.Z.S. Parts XXI.–XXV. January–September, 1884.]

Part XXI. contains the remainder of the Limicolæ and some of the Gaviæ, and Pts. XXII. and XXIII. the rest of the latter family, concluding Vol. III. In deference to the sequence observed in former Editions, and to existing prejudices, Pt. XXIV. opens with the Petrels, followed by some of the Alcidæ, and Pt. XXV. ends with the Steganopodes, leaving only the Herodiones and the Anatidæ to complete the work.

99. *Seebohm's 'British Birds and their Eggs.'*

[A History of British Birds, with Coloured Illustrations of their Eggs. By Henry Seebohm. Parts II.–IV. Royal 8vo. London: 1883–84.]

Mr. Seebohm's fourth part, which was issued in July last, completes the second volume of his 'History of British Birds and their Eggs,' a work which it is not necessary for us to commend to ornithologists. In spite of what we must venture to call some eccentricities, Mr. Seebohm's book is full of interest. Some of the information conveyed has, perhaps, the charm of novelty; *e. g.*, that the Common Partridge has, in the eastern counties of England, "been partially exterminated by the Red-legged Partridge, but still occurs locally in these counties." Later on we are told that in the eastern counties the Red-legged Partridge "has more or less succeeded in driving out the resident species." But, speaking generally, Mr. Seebohm's large experience in the field entitles him to a respectful hearing, and will secure his book a very large circulation amongst the students of the British Avifauna.

100. *Selys-Longchamps on the Tits* (Parinæ).

[Considérations sur le Genre Mésange (*Parus*). Par M. Edm. de Selys-Longchamps. Bull. Soc. Zool. de France, 1884, p. 32.]

In this important monographical notice of the Parinæ, the author has given a synopsis of the species, subspecies, and races which compose the group, pointing out with admirable clearness the salient features of each. This key has been translated by Canon Tristram, and will be found on p. 395 of the present volume of 'The Ibis.'

101. *Sharpe's 'Birds of South Africa.'*

[The Birds of South Africa. By E. L. Layard, F.Z.S. New edition, thoroughly revised and augmented, by R. Bowdler Sharpe, F.L.S., F.Z.S. Part VI. London: Quaritch, April 1884.]

We heartily congratulate Mr. Sharpe upon the issue of the final number of his New Edition of the 'Birds of South Africa.' As completed the work forms a portly volume of 890 pages and twelve coloured plates, and forms a most acceptable Hand-book for the student of South-African Ornithology. The species included in the area treated of, which extends on the east as far north as Zambesi, and to the Quanza River on the west, are 812 in number.

102. *Taczanowski's Ornithology of Peru.*

[Ornithologie du Pérou. Par Ladislas Taczanowski. Tome i. Royal 8vo. Rennes: 1884. 542 pp.]

We are much pleased to receive the first portion of this laborious undertaking. It commences by a dedication to Count Constantin Branicki, by whose liberal assistance two well-known travellers have amassed the vast material upon which the work is based. A very interesting introduction by one of these travellers (Mr. Stolzmann) gives us an instructive general account of the physical divisions of the Peruvian Republic, and enumerates some of the special ornithic forms by which they are characterized. The systematic portion of the work commences with the Birds of Prey, and, besides the Caprimulgidæ, Trochilidæ, and Cypselidæ, treats of various families of Passeres. Altogether 332 species are spoken of, but M. Taczanowski tells us that *more than* 1000 Peruvian species are represented by specimens in the Warsaw Museum. *Lurocalis rufiventris* is described as new.

M. Taczanowski will excuse us if we remark that, although a very extensive synonymy is not necessary, references should be given to *all species* based upon specimens obtained by his great collectors Jelski and Stolzmann, even when, as is the case with *Dacnis modesta* and *Dacnis xanthophthalma,* they may have been founded on female specimens. We trust, also, that a map will ultimately be given with *all* the collectors' localities plainly marked.

103. *Tristram's Fauna and Flora of Palestine.*

[The Survey of Western Palestine.—The Fauna and Flora of Palestine. By H. B. Tristram, LL.D., D.D., F.R.S. Published by the Committee of the Palestine Exploration Fund. 4to. London, 1884.]

With great pleasure we have received a copy of this long-expected work, which, however, it is only right to say, has been delayed from causes quite beyond the author's control. The 'Fauna and Flora of Palestine' has now been issued by the Committee of the Palestine Exploration Fund, and forms a volume of their Survey.

The Birds of Palestine, according to Canon Tristram, consist of 348 species. Each of these is named, and one or two references are added. A short account of its occurrence in Palestine is then given, as also a few notes on its general range. The Dipper of Lebanon is now, we believe for the first time, elevated to the rank of a species as *Cinclus rufiventris* (p. 51).

The following species are well figured :—

Erithacus gutturalis.	Petronia brachydactyla.
Cinnyris osea.	Amydrus tristrami.
Serinus canonicus.	Caprimulgus tamaricis.
Passer moabiticus.	Plotus levaillantii.

XLVIII.—*Letters, Announcements, &c.*

We have received the following letters addressed to the Editors of 'The Ibis:'—

Northrepps Hall, Norwich,
June 30th, 1884.

Sirs,—I beg to subjoin an extract from a letter addressed to me, under date of 12th May last, by Mr. K. H. Bennett, of Ivanhoe, New South Wales. The information it contains relative to the habits of two of the scarcest Australian Birds of Prey will, I think, be of interest to the readers of 'The Ibis.' Mr. Bennett writes :—

"I have two skins of *Aquila* (*Nisaetus*) *morphnoides*, one in the down, the other almost able to fly, obtained from separate nests last November; this bird seldom lays more than one egg; I have occasionally found two, but such cases are rare.

"In January last I found a nest of *Gypoictinia melanosternon*, in which was one young one; and amongst the remains of various animals scattered beneath the nest I counted 21 rabbit-skulls, 4 bustards, 3 iguanas, and 37 jew-lizards, besides the remains (skulls &c.) of a number of other small animals, chiefly birds."

Yours &c.,
J. H. Gurney.

Northrepps Hall, Norwich,
July 5th, 1884.

Sirs,—In 'The Ibis' for 1868, p. 253, I suggested the specific name of *australis* for the Ostrich of South Africa, and at p. 256 of my edition of Andersson's 'Birds of Damara Land,' I mentioned, on the authority of Mr. A. D. Bartlett, that the skin which is visible on the "thighs and other bare parts" of the Southern Ostrich "is invariably bluish, excepting the angle of the gape, which is flesh-coloured, as are also the cere and scutellations of the tarsi and feet." These peculiarities are very similar to those described by Dr. Finsch (*suprà*, p. 352) as characteristic of the Ostrich lately announced as distinct, and seem to make it probable that *Struthio molybdophanes* may prove to be identical with *S. australis*.

Yours &c.,
J. H. GURNEY.

Ridgway Ornithological Club, Chicago,
June 5th, 1884.

SIRS,—The following may be worthy a place in 'The Ibis':—

The Ridgway Ornithological Club of Chicago held its regular meeting June 5th. The Club was reorganized under its new Charter as an incorporation, and officers for one year elected as follows:—

President: B. T. GAULT.
Vice-President and Treasurer: GEO. FREAN MORCOM.
Secretary: H. K. COALE.
Curator: JOS. L. HANCOCK.
Librarian: F. L. RICE.

Mr. Coale read a paper on the Blue Mountain-Parrot of Australia, exhibiting specimens of the birds and a set of eggs laid in captivity.

Yours &c.,
H. K. COALE,
Secretary.

Ashridgewood, Wokingham, Berks,
July 20th, 1884.

SIRS,—There is a slight clerical error in our paper on the variations of *Saxicola monticola* in 'The Ibis' for 1883,

p. 336, line 13, which has unfortunately reappeared in Mr. Sharpe's new edition of Layard's 'Birds of South Africa,' p. 820; and as this might mislead any one referring to the question, I take this opportunity of correcting our mistake.

Instead of "We consider stages 6 and 7 to be of about the same period, &c.," the paragraph should read "We consider stages 5 and 6, &c." It is a very small correction, but an important one.

Yours &c.,
SAVILE G. REID.

Riddagshausen, Brunswick,
July 31, 1884.

SIRS,—I have just received from Dr. Platen, the well-known explorer of the Moluccas, whose ornithological collections have for many years come to me, a letter from Rurakan, a village in the Minahassa district of Celebes, in which he informs me that he has just forwarded a collection of 666 bird-skins, referable to about 110 species, which he has collected in the island of Waigiou, together with a considerable number of eggs belonging thereto. A collection from Halmahera and the little island of Gebe will shortly follow.

As Mr. Wallace only obtained examples of 73 species in Waigiou, it is probable that Dr. Platen's collection may contain many new species. Dr. Platen does not give further information, except that the series of *Diphyllodes wilsoni* and *Psittacula diophthalmica* are of great interest.

Yours &c.,
A. NEHRKORN.

Nuneham Park, Abingdon,
July 31, 1884.

SIRS,—Having been confined to the house by illness, I have had leisure to watch the operations of the friends of my youth, the birds. The chief drawing-room looks towards the south; it is situate on the first floor, and in front of it is a broad balcony, with a flight of steps leading down to a terrace. A corridor, connecting one of the wings with the body of the house, also opens on to the same balcony. The sides of the corridor and of the balcony, which is a stone one, and reaches down to the ground, are covered with *Wistaria*, roses, briars, pomegranate, jasmines, and other creepers. In these shelters the following nests were constructed this summer:—two Flycatchers', two Water-Wagtails', a Thrush's, and a Linnet's. I may say that all the nests were within easy reaching distance from one point or another.

At 3.30 P.M. on the 16th of May I was looking out of the window and perceived a Cuckoo alight upon the bough of a large wych-elm just beyond the terrace.

The window I was sitting at was a very large plate-glass window, some 8 or 10 feet high, and the Cuckoo seemed to be aware of my presence there. I accordingly withdrew my wheel-chair out of the bird's sight. After the space of about ten minutes the Cuckoo made a slanting swoop, like that of a Hawk, and appeared as if it was coming straight into my face. Its course, however, took it about six feet lower, and it went into a Wagtail's nest which was built in a sweet-briar. It is remarkable that, although the Cuckoo remained there for twenty minutes, the Wagtails never made their appearance. The Flycatchers, however, arrived after the Cuckoo had been on the nest about five minutes, and appeared at first to be much agitated, but gradually ceased to trouble themselves about the matter. When the Cuckoo went to the nest two eggs had been laid; it left the nest much disturbed. The owners of the nest reappeared about an hour afterwards, but they never seemed to take to it again. Four days elapsed, and the Wagtails had clearly deserted their nest. I determined then to try an experiment, and to test the accuracy of the statement made by some of our great ornithological authorities, that the Linnet will bring up the young Cuckoo. By myself this statement has been always received with suspicion, on account of the difference in diet between the Linnet and the Cuckoo. Into the nest, then, of the neighbouring Linnet the Cuckoo's egg was placed. In this nest were five new-laid eggs; two were removed to give more room. In due time the young Cuckoo was hatched—

that is to say, in thirteen days. By the third day the young Linnets, three in number, were all expelled by the intruder; two were replaced whilst yet alive, but were again expelled, and the young Cuckoo reigned alone. Its life, however, like that of other usurpers, did not seem altogether a happy one; by the end of the week it had ceased to open its wide impatient mouth, and appeared to die of starvation. The old Linnets perched mournfully on a rail in front of the window, as if perplexed by the miscarriage of their matrimonial arrangements. In order to test the parental capabilities of the birds, a young Greenfinch, of the same age as the former occupants of the nest, was given to the Linnets; this bird, living on similar food as its foster-parents, was successfully reared, and in time took its flight. As far as a single instance can prove any thing, this experiment goes to show that the Linnet is not capable of rearing the young Cuckoo: of course corroborative evidence would be required; but, for my part, I should have been surprised if it had been otherwise. The internal construction of insectivorous and graminivorous animals is so different (I mean of those which feed wholly on one species of food or the other), that, but for the assertions of distinguished naturalists, I should have conceived no doubt on this subject could have existed.

I give my story for what it is worth.

Yours &c.,
E. N. HARCOURT.

The Grove, Oldfield, Altrincham,
August 11th, 1884.

SIRS,—I wish to point out that the name *Anthus pallescens*, Bocage, Jorn. Lisb. 1874, p. 152, is preoccupied by Vig. & Horsf. Tr. Linn. Soc. xv. p. 229, and I therefore propose that it should be changed to *Anthus bocagii*.

This fact seems to have escaped the notice of Mr. Sharpe in his new edition of 'Layard's Birds of South Africa.'

Yours &c.,
FRANCIS NICHOLSON.

Additions to the Collection of Birds in the British Museum of Natural History in 1883.—The total number of accessions during the year 1883 was 992; 69 of them were of species new to the collection, and 27 were types. The following were the most valuable acquisitions:—

Additions to the groups of British Birds were made by Lord Walsingham, viz. Missel-Thrush, Water-Ouzel, Green and Golden Plovers, Dabchick; and by Duncan Parker, Esq., two nests of the Red-backed Shrike, with old, young, and eggs.

Twenty-four birds from Brighton; presented by R. B. Sharpe, Esq.

A specimen of the Tawny Pipit (*Anthus campestris*), caught at Brighton in October 1882; presented by Messrs. G. Swaysland and Sons.

Seventy-four specimens of Wading-birds, amongst which were three Sabine's Snipes and many other British-killed Limicolæ, from the collection of J. E. Harting, Esq., F.L.S.

Forty birds from Japan; purchased.

Forty-four birds from the Caucasus, Central Asia, and Siberia, including *Tetraogallus caucasicus*, *Phasianus chrysomelas*, and many other species new to the collection; purchased.

Twenty-three birds from Florida; presented by Walter Dismore, Esq.

Twenty-three skins from the Gold Coast; presented by Captain Moloney.

Thirty skins collected by Captain C. T. Bingham in the Thoungyun Valley, Tenasserim, comprising many species new to the collection, such as *Anthocincla phayrii*, *Gampsorhynchus torquatus*, *Pomatorhinus tickelli*, &c.; purchased.

Eleven specimens of Hornbills and Raptorial Birds from Sumatra; collected by Mr. H. O. Forbes, and presented by Francis Nicholson, Esq.

Forty skins of Birds from the Nilghiris and the Brahmagherry Hills; presented by W. Davison, Esq.

Seventy-seven specimens from the Lawas River and from Kina Balu, in Borneo, and from the Sooloo Islands, collected by Mr. F. W. Burbidge, and containing the types of *Tany-*

gnathus burbidgii, Gallus stramineicollis, and *Buchanga stigmatops*; presented by H. Veitch, Esq.

Eight species of Birds from the Lawas River, N.W. Borneo; presented by W. Pretyman, Esq.

Thirteen rare species from Java and the Molucca Islands, comprising eight new to the collection; presented by the late Director of the Leiden Museum.

Seventy-four skins from Tenasserim; presented by Captain Bingham.

Twenty-two specimens collected by Mr. A. Goldie in the Astrolabe Mountains, S.E., New Guinea; amongst them the type specimens of a new Paradise-bird (*Paradisea decora*) with other rarities; purchased.

An example of the rare Bird of Paradise, *Diphyllodes guilielmi-tertii*; purchased.

The types of *Drepanornis cervinicauda* (Sclater), from S.E. New Guinea; presented by Dr. Bennett, of Sydney.

An example of the Tooth-billed Bower-bird (*Scenopœus dentirostris*) from Queensland; presented by E. P. Ramsay, Esq.

[From the Parliamentary Report of the Brit. Mus. 1884. We have ventured to correct some obvious misprints.—Edd.]

Sheep-slaughter by Nestor notabilis.—The 'Canterbury Times' of March 19th, 1884, gives the following extract from a letter received from Mr. R. Bouchier, Sheep Inspector at Queenstown, Lake District:—"I was last week on a station on Wanaka Lake, where a mob of hoggets were attacked by Keas, and in one night no less than 200 sheep were killed. The shepherds killed most of the birds, however. The bonus for the destruction of Keas gives a great impetus to men to destroy the birds, but sometimes it is hard-earned money. The ranger of one run in this district gives contractors 4*s.* per beak, and his shepherds 3*s.* per beak; and the consequence is that, this shearing, hardly a sheep was marked, and the death-rate was reduced by nearly one-half. The total number of beaks delivered at my office was 1574."

Bird-notes from Tasmania.—At the meeting of the Royal Society of Tasmania on June 9th, 1884, Mr. Morton exhibited a Freckled Duck (*Anas nævosa*), shot at Ross, on April 12th. This species of Duck was found in Victoria, South Australia, and Western Australia, but had never before been reported as found in Tasmania.

Colonel Legge strongly advocated the formation of a complete collection of Tasmanian bird-skins, carefully labelled, locality, &c. He stated he was of opinion that there were yet one or two new species of birds in the back-country which had hitherto been overlooked by collectors and others. He trusted the Council of the Society would endeavour to have air-tight cabinets made for such a collection, similar to those used in the British and other leading museums.

The Curator of the Museum said he was glad that Colonel Legge had brought the matter before the Fellows, and referred to the excellent skin-collection the Australian Museum, Sydney, possessed. He said a great deal might be done by their country friends in forwarding to the Museum specimens of animals or birds, which, if not actually wanted for the Museum collection, would be valuable for exchanges with other museums.

We are glad to learn that our esteemed member Mr. William Foster (not Forster), whose death our Secretary announced at the last Annual Meeting of the B. O. U. (*suprà*, p. 362), is alive and well.—Edd.

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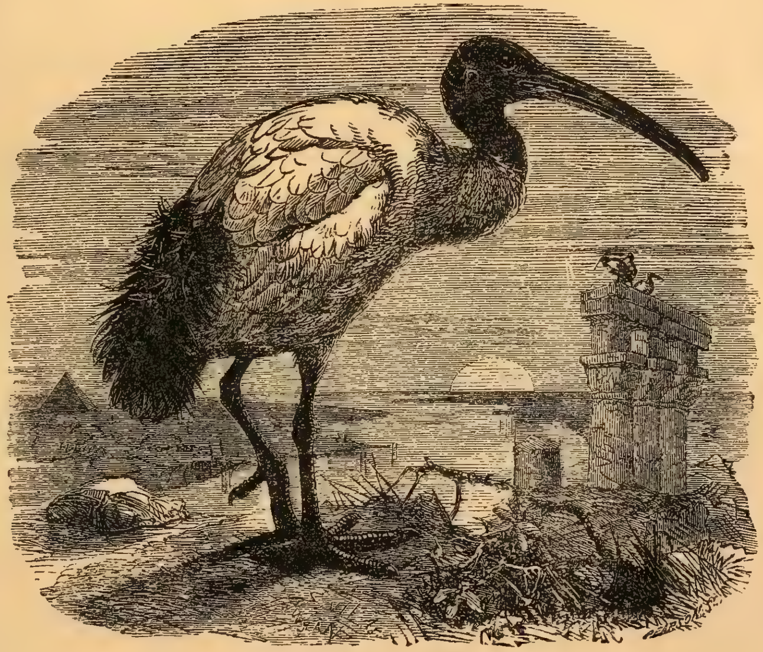

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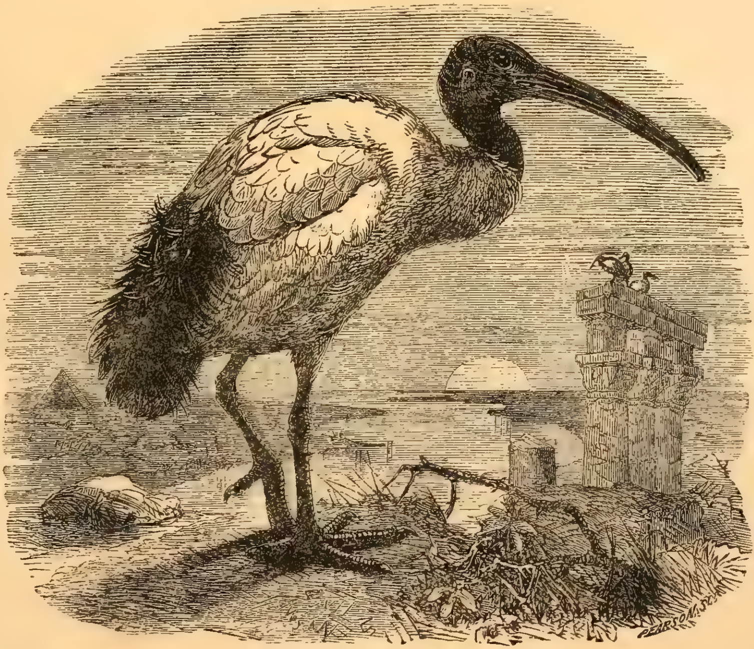

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20. BLASIUS. Publicationen der "Zoological Society of London." (Verein für Naturwiss. Braunschweig, 1883.)

21. Jahresbericht (1882) des Ausschusses für Beobachtungsstationen der Vögel Deutschlands. (J. f. O. 1884.)

22. Jahresbericht (1882) des Comités für ornithologische Beobachtungsstationen in Oesterreich und Ungarn. Royal 8vo. Wien, 1883.

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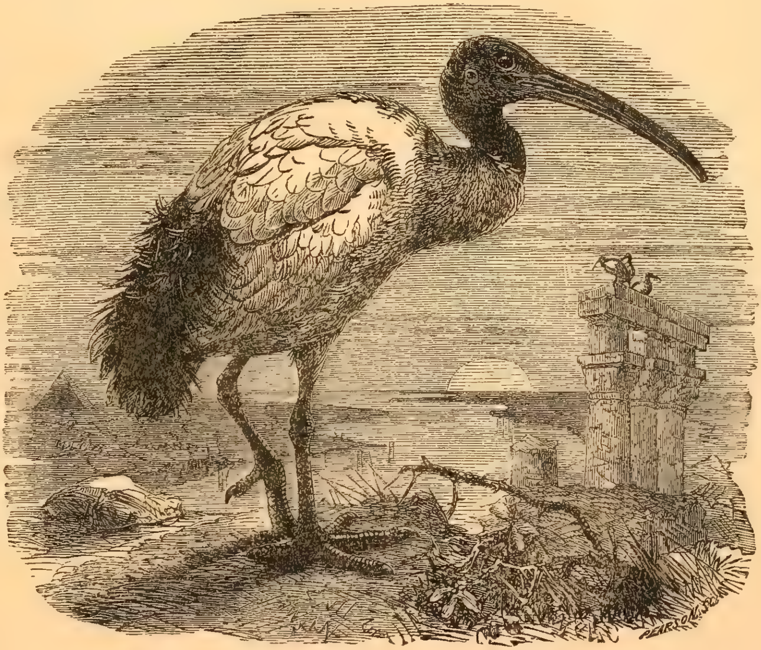

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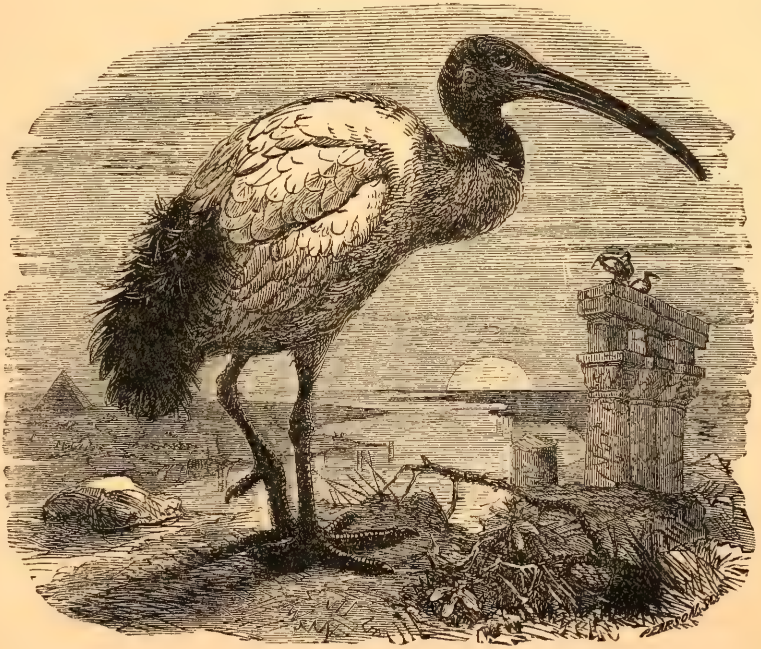

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